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TECHNICAL BULLETIN

95

A REVIEW OF QUALITY BUILDING MATERIALS

FARR

research & new products

The Producers' Council, Inc.
March, 1961

Kansas City Public Library and School Board Administration Building, Kansas City, Mo.
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TECHNICAL BULLETIN **95**

a review of quality building materials

MARCH • 1961

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established 1921

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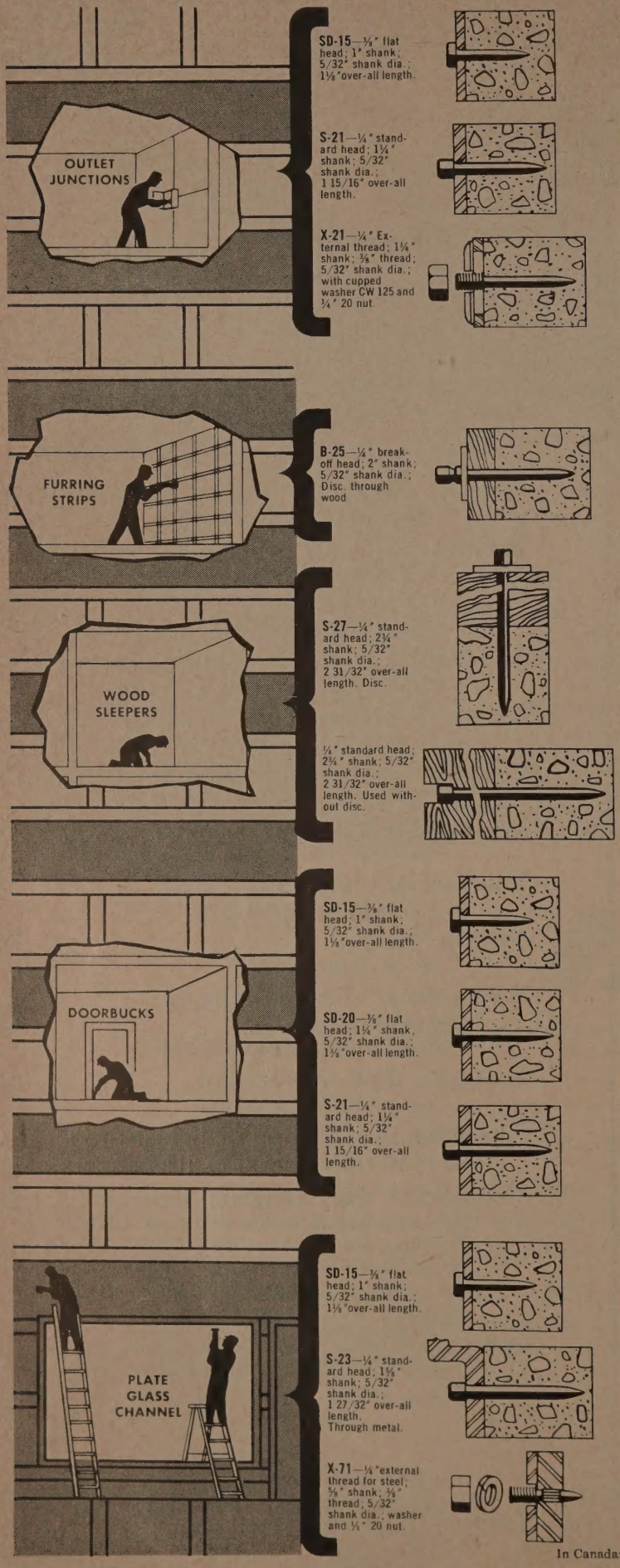
TYPICAL POWER-MATE APPLICATIONS AND RECOMMENDED STUDS


OUTLET JUNCTIONS
SD-15—⅜" flat head; 1" shank; 5/32" shank dia.; 1⅛" over-all length.
S-21—¼" standard head; 1¼" shank; 5/32" shank dia.; 1 15/16" over-all length.
X-21—¼" External thread; 1¼" shank; ⅜" thread; 5/32" shank dia.; with cupped washer CW 125 and ¼" 20 nut.
FURRING STRIPS
B-25—¼" break-off head; 2" shank; 5/32" shank dia.; Disc. through wood
WOOD SLEEPERS
S-27—¼" standard head; 2¼" shank; 5/32" shank dia.; 2 31/32" over-all length. Disc.
¼" standard head; 2¼" shank; 5/32" shank dia.; 2 31/32" over-all length. Used without disc.
DOORBUCKS
SD-15—⅜" flat head; 1" shank; 5/32" shank dia.; 1⅛" over-all length.
SD-20—⅜" flat head; 1¼" shank; 5/32" shank dia.; 1⅛" over-all length.
S-21—¼" standard head; 1¼" shank; 5/32" shank dia.; 1 15/16" over-all length.
PLATE GLASS CHANNEL
SD-15—⅜" flat head; 1" shank; 5/32" shank dia.; 1⅛" over-all length.
S-23—¼" standard head; 1⅝" shank; 5/32" shank dia.; 1 27/32" over-all length. Through metal.
X-71—¼" external thread for steel; ⅝" shank; ⅜" thread; 5/32" shank dia.; washer and ¼" 20 nut.

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with Remington's POWER-MATE Stud Driver

You'll get lower fastening costs and greater on-the-job efficiency with Remington's Power-Mate Stud Driver. That's why leading architects in this country and abroad are now specifying this tool for all their fastening operations.

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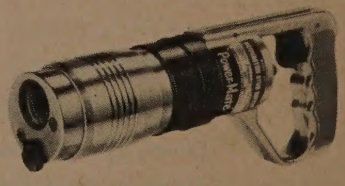
K-4 ⅜" MEDIUM- AND HEAVY-DUTY KIT—Uses ⅜" Remington Studs and 22- or 32-cal. power loads.



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for average frequency doors

Companion to popular BB93 Paumelle Hinge

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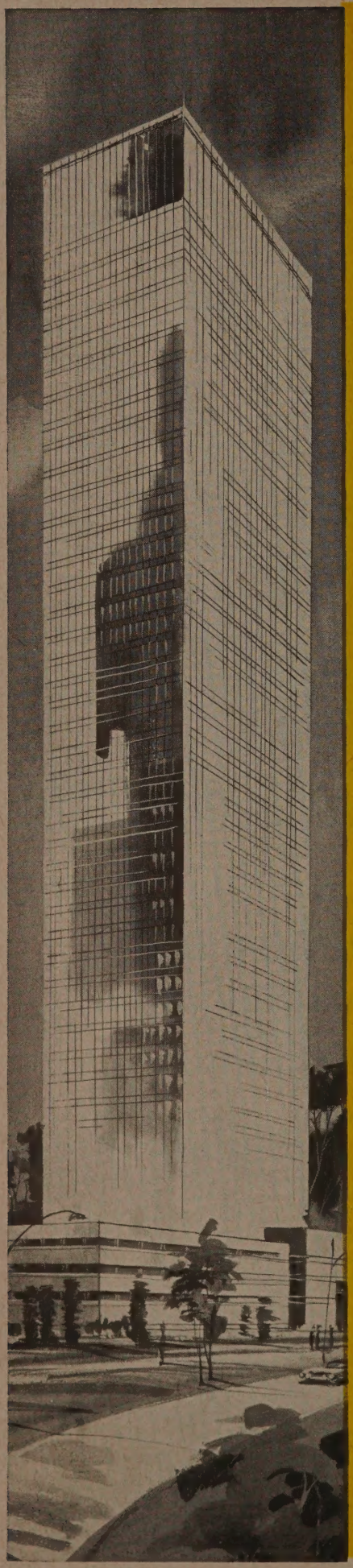

the hinge design selected by the architects themselves!

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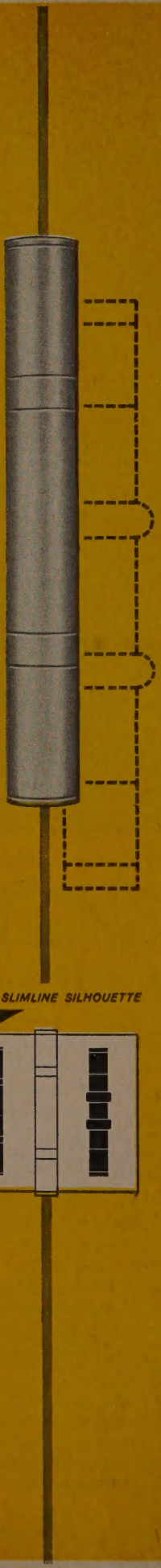

THEY CAME . . . THEY SAW . . . THEY VOTED OVERWHELMINGLY FOR *THIS* HINGE! Before deciding to market this hinge, Stanley consulted hundreds of architects, in every section of the country, to get their opinion. In this extensive research, many designs of hinges were submitted. The new STANLEY hinge was the overwhelming choice. For fully descriptive literature, write today to Stanley Hardware, Division of The Stanley Works, Dept. C, 28 Lake Street, New Britain, Connecticut.

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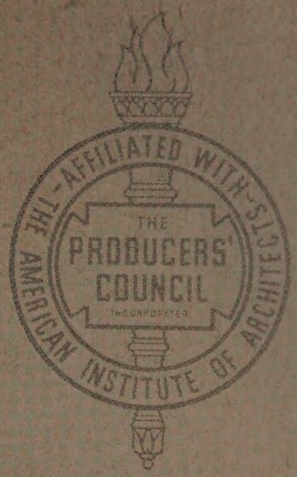

THE PRODUCERS' COUNCIL, INC.

its organization

and services

. . . A BRIEF DESCRIPTION

EST. 1921

THIS IS THE EDUCATIONAL PAMPHLET that will be distributed to all chapter members in the near future. Prepared to provide insight into the Council's history, aims, and activities on both national and local levels, it should help answer the question—"Just what is the Producers' Council?" Reproduction of the pamphlet begins the TECHNICAL BULLETIN's first Chapter Section. The Section also includes chapter and general Council news of interest both to chapter members and to the architects they serve.

The Producers' Council, Inc. - -

HISTORY AND PURPOSE

The Producers' Council is the national organization of manufacturers of quality building materials and equipment. It has grown from a manufacturers' committee formed in 1921 by the American Institute of Architects to its present status of a national trade association comprised of nearly 200 manufacturers and 30 product trade associations.

The Council, the only commercial organization affiliated with the AIA, was formed to improve the quality of advertising and sales promotion literature directed to the architect. A substantial improvement in this literature and in the more effective use of the manufacturers' advertising dollar has been accomplished through periodic competitions sponsored jointly by the Council and the AIA. Since 1956, the Council's area of contact in this field has widened to include the home builder, with an annual product literature competition sponsored jointly by the Council and the National Association of Home Builders. A similar competition is to be established for the consulting engineer.

Thus, the Council's original objective is still important today, but it is only a phase of what has become the association's over-all purpose—to promote the sale and proper use of quality building materials. To achieve its purpose, the Council operates on two levels—a national level, as one national organization working with other national organizations; and a local, more personal level, as a group of men working with other men through a chapter structure.

NATIONAL LEVEL

Member companies of the Producers' Council form a diversified group, manufacturing the components of the most complex skyscraper as well as the simpler requirements of a modest home. Each member company designates a man from its top executive echelon to be its "official representative" to the Council. The official representatives elect the Council's officers and the Board of Directors, the association's governing body. The officers and the Board, along with the Council's staff organization (headed by a managing director), form the national office in Washington. Member companies pay dues to this office.

Through the national office, the Council works with other national organizations in the following ways to serve the professions of architecture, home building, and engineering on industry-wide bases:

Architecture . . .

- the Council has a history of more than 50 liaison committee meetings with the AIA. The Council and the AIA sponsor jointly and the Council administers the product exhibition which is one of the features of the AIA's annual convention. The Council's seminar program is another outgrowth of the liaison committee's work. The program consists of three seminars—curtain wall, roofing, and air conditioning—sponsored by Council members, prepared by the Council in coordination with technical men from member companies, and specifically oriented to architects, although of interest to home builders and engineers as well. The seminars are sponsored and prepared in package form on a national level and are presented on a local level through the Council's chapter structure.

- the Council publishes quarterly the TECHNICAL BULLETIN, a magazine with the primary purpose of keeping the architect currently informed on technical developments, including new products and new techniques of design and construction. It is distributed without charge to the entire AIA membership, plus a selected list of engineers and other specifiers. Each issue concentrates on a specific area, such as school or commercial construction. One issue annually concentrates on research and new products, including about 900 listings of manufacturers' building product literature available to architects.

- the Council sponsors Architectural Sales Representatives' Institutes, three-day concentrated ses-

- - a brief description

sions taught by architectural educators and practicing architects with the purpose of exposing architectural salesmen to the business side of architectural practice. Topics discussed include the nature of the profession, the architect's responsibilities, and what he needs and really wants from the salesman.

• the Council also meets with representatives of the Construction Specifications Institute.

Home Building . . .

• the NAHB-PC Joint Committee has been meeting to resolve mutual problems since the early 1950's. Particular emphasis is placed on marketing and improving communication between builders and manufacturers. The committee has published a Merchandising Catalog as a central source of manufacturers' merchandising aids for builders. Other projects include the development of a builder's filing system for manufacturers' literature, and product information meetings to be presented to small volume builders at the local level.

Engineers . . .

• the Council meets with representatives of the Consulting Engineers Council.

GENERAL ACTIVITIES

Much of the Council's work on the national and the local levels affects the professions of architecture, home building, and engineering simultaneously. On the national level, an important example is the Council's advocation of modular construction—the use of the four-inch module in building design. Acting as co-sponsors, the Council, the AIA, the NAHB, and the Associated General Contractors organized and are the principal support of the Modular Building Standards Association, which is now housed in the Council's offices.

The Distribution Study is a five-year study which affects all the building professions. Sponsored by 56 Council members, its main objective is an evaluation of changes rapidly taking place in the distribution of building materials. It has been a prime concern of recent annual conventions of the Council, which are held for the official representatives each fall to discuss broad industry problems like marketing and forecasting techniques and to elect officers and the Board. Concurrently with the annual membership meeting are held instructive sessions for the Council's chapter presidents.

LOCAL LEVEL

Many Council activities on the national level are implemented on the local level through the association's chapter structure. The first chapter was formed in Chicago 30 years ago. Today there are 48 chapters in the larger cities throughout the United States, including Honolulu.

Sales representatives of national member companies compose the chapter membership. Although each chapter is an independent operation, chapter activities are coordinated and supervised by a Field Director who is part of the staff organization in Washington. Through his office the chapters exchange mutually beneficial information.

Chapter activities emphasize presentations of new products and new installation techniques to a specific segment of the industry, such as architects, usually with the chapter as host at monthly luncheon or dinner meetings. Also, mutual interest meetings, of value to the entire industry and not limited to any segment, are held—topics are usually local, such as local economic conditions discussed by a local banker. Occasionally a world problem of the industry is discussed by a special, widely-known speaker. Social activities are held at times to promote better understanding between individuals and thus, ultimately, better relations between manufacturers and their customers.

Collectively, the sales representatives in the chapters make personal contact annually with approximately 40,000 architects, engineers, home builders, and contractors.

PRODUCERS' COUNCIL

Chapters To Present Air Conditioning Seminar

Denver—on March 9—will be the first Producers' Council chapter to present the Council's Air Conditioning Seminar. In addition, 10 other chapters plan to present the program. At the present time the schedule is:

Albany	—	April 13
Buffalo	—	May 17
Chicago	—	April 20
Columbus	—	May 22
Dallas	—	May 16
Denver	—	March 9
Kansas City	—	April 11
Los Angeles	—	April 11
Pittsburgh	—	May 4
Seattle	—	March 24
Toledo	—	April 26

Dates for other chapter cities will be announced later. Those interested in attending the all-day program should contact the Producers' Council chapter in their city.

The Air Conditioning Seminar is an educational program which stresses the year-round benefits of air conditioning, and will be of special interest to architects, and consulting, structural, and mechanical engineers.

The program has a three-fold purpose:

1. To review changes and new developments in air conditioning as related to architectural practice.

2. To advance the use of, or provision for, air conditioning, on economic grounds, in many buildings that would benefit by its use.

3. To improve the quality of performance that can and should be achieved with modern equipment.

Designed to last from five to six hours, the seminar program includes two and a half hours of films with recorded narration on twelve topics interspersed with substantial question and answer periods. The twelve topics are divided into three sections and include:

Part I—Types of Systems

1. Architect-Client Interests in Air Conditioning
2. Air Conditioning Fundamentals
3. Equipment Used in Modern Air Conditioning
4. Selection of Equipment in Relation to Building Design

Part II—Design Criteria

5. Factors Affecting Air Conditioning Loads
6. Air Conditioning Loads Related to Glass Areas
7. Air Conditioning Loads Related to Opaque Areas
8. Interior Heat Loads

Part III—Human Comfort

9. Control of Temperature and Humidity
10. Air Distribution for Comfort
11. Air Cleanliness
12. Sound Control in Air Conditioning Systems

The seminar is sponsored by company and trade association members of the Producers' Council who are especially interested and involved in the air conditioning field. They include:

American Air Filter Company, Inc.
American Radiator & Standard Sanitary Corporation
Day-Brite Lighting, Inc.
Libbey-Owens-Ford Glass Company
Minneapolis-Honeywell Regulator Company
Owens-Corning Fiberglas Corporation
Pittsburgh Plate Glass Company
Westinghouse Electric Corporation
Air Conditioning & Refrigeration Institute
Air Filter Institute
American Gas Association
Edison Electric Institute

Technical personnel—experts in their field—from the sponsoring companies and associations have pooled their talent to develop this outstanding educational program—first of its kind. The companies and associations will join in supplying moderators to coordinate the presentations, and will help supply the panel members necessary for the question and answer periods. The chapters will supplement the panels with local architects, engineers, and utility company representatives.

Those attending the seminar should derive particular benefit from the question and answer periods—an opportunity to seek solutions to such problems as:

—how far can architects go to do a good job, beyond specifying a good air conditioning manufacturer's equipment and following recommendations?

—air conditioning schools. Most school boards are afraid of the bond-voting public's reaction if they even air condition the principal's office.

What do manufacturers plan to do about changing the public's attitude?

—solar radiation on the east exposure, a problem in some areas. What is the panel's opinion as to the extent of the east wall sun load in this particular local area?

—uncovering an air conditioning system that carries undesirable heat from one place in a building to another where it can be used.

—why most problems show up during the intermediate seasons.

—how is sun on the east side or north side taken into account if the load on the building is calculated at 2 P.M.?

—responsibility for maintenance and operation of an air conditioning system. What do manufacturers of air conditioning equipment suggest that architects can do?

—what are the space requirements of the different types of air cleaning devices—which takes most, least?

—to what extent can insulation for pipes and ducts also be expected to perform a sound absorbing function?

All those registering for the seminar program will receive a printed Air Conditioning Handbook based on the content material of the seminar. This handbook will be invaluable as a reference source of up-to-date information on air conditioning problems and solutions.

The Air Conditioning Seminar is important—to architects, engineers and the air conditioning industry. Through it, architects can use air conditioning more effectively to benefit the client, the air conditioning industry, and themselves. Manufacturers recognize that only satisfied users of air conditioning can assure the future economic growth of the air conditioning industry.

The program is an outgrowth of a 1958 joint AIA-PC meeting in which the architects asked the Council to develop an educational program on air conditioning to cover trouble spots and improve architects' understanding of the air conditioning problem.

During the past two decades, air conditioning has been increasingly adopted, for economic reasons as well as for comfort. Costs in many manufacturing and processing establishments can be reduced markedly through its use—indeed, in some cases, it can reduce the total cost of buildings. However, along with increased use of air conditioning has gone the idea that any kind of an air conditioning system can produce good results. Thus, when bids have exceeded estimates and air conditioning systems have been selected with cost reduction as the main factor, marginal air conditioning systems have been installed many times. These marginal systems are not providing satisfactory benefits and are not a credit to the air conditioning industry.

With these facts in mind, interested member companies of the PC helped organize an air conditioning seminar committee, which contacted 75 architectural firms across the country by a questionnaire. Items of greatest interest to architects as indicated on the completed questionnaires were incorporated into the seminar. Material and methods used have been reviewed by AIA representatives throughout the entire period, and carry AIA headquarters' enthusiastic endorsement.

CEC-PC To Sponsor Engineers' Literature Competition

The Consulting Engineers' Council and the Producers' Council jointly will sponsor the first "Engineers' Technical and Product Literature Competition."

The competition will be the first attempt that has been made to analyze manufacturers' literature directed specifically to the engineer. Announcements were mailed to manufacturers in February. The deadline for entries is March 20. Eligible literature includes technical manuals, product catalogs, promotional brochures, and space advertising. The Producers' Council is handling the administrative details, and all inquiries about the competition should be addressed to the Publications Department, The Producers' Council, Inc., 2029 K St., N. W., Washington 6, D. C.

A jury of five prominent consulting engineers will judge the entries in Chicago March 31. Awards will be presented during the CEC's Annual Meeting, scheduled for Chicago May 4–6.

The decision to proceed with the competition was made at a meeting of the CEC-PC Joint Committee in Chicago January 30.

Earl F. Bennett (left), PC secretary, and H. L. Cramer (right), PC treasurer, discuss CEC-PC relations with Hueston M. Smith, CEC president.

Chapter News

From the East Coast to the West Coast to Hawaii, the 48 Producers' Council chapters have been busy spreading the word on the Producers' Council, its members and the quality products they produce.

Two very well-received programs recently presented illustrate how PC chapters perform.

In November '60, the Baltimore chapter held a panel meeting on modular building standards. Modular dimensioning practices were discussed by three architects working in the modular field. Byron Bloomfield, AIA, Executive Director of the Modular Building Standards Association, spoke on "The National Modular Picture," including the rate of introduction of new modular products, architectural conversion to modular drafting, and industry activities toward shortening the conversion period.

Clifford Coleman, AIA, Coleman & Coleman, Landisville, Pa., an architect member of the Governor's Advisory Council of the State of Pennsylvania, spoke on considerations in drafting the recommendation for modular schools in Pennsylvania. A ruling became effective in Pennsylvania December 1, 1960, requiring modular principles and modular materials for all state-aid schools.

David H. Wilson, AIA, Wilson & Christie, Towson, Md., a Baltimore architect using modular dimensioning in daily practice, related the current attitudes of contractors and suppliers in interpreting the drawings and furnishing local materials.

The three PC chapters of California—San Francisco, San Diego, and Los Angeles—combined to bring Eduardo Torroja from Spain to speak to the 1960 convention of the California Council, AIA, at Yosemite in October '60. Torroja, a world leader in the development of concrete structures, founded and now directs one of the world's outstanding model testing laboratories, The Technical Institute of Construction and Cement, at Costillares, near Madrid, Spain. CCAIA President Wayne S. Hertzka, FAIA, called the convention "one of the most successful in the history of our statewide organization," giving special credit to the California PC. "A note of special gratitude belongs to the California Producers' Council. The PC's support in bringing Eduardo Torroja from Spain to speak at our convention was a most significant contribution and reflects the PC's desire to provide a real service to the architectural profession," Hertzka said in the *Counciletter* of the CCAIA.

These two contributions to the architectural profession by PC chapters go a long way toward answering the question—"What service can a PC chapter perform?"

The Pittsburgh chapter, after having surveyed more than 300 architects and engineers in the Tri-State area, reported that Western Pennsylvania's heavy construction industry will have its second straight billion-dollar year in '61, and then prepared a long story based on the prediction. The story made the front page of the Pittsburgh *Press*, Sunday, January 8, 1961. The *Press* also printed later in January a picture taken at the chapter's January luncheon meeting when the Silver Bowl award was formally presented to the Pittsburgh chapter. Local national officers from Pittsburgh, including Elmer Lundberg, Earl Bennett, and Hal Cramer, were there, in addition to guest architects and engineers. A. M. "Brig" Young, member of the Board of Directors of the Producers' Council, was the featured speaker.

The *Producer News*, the North Texas chapter's newsletter, has announced the schedule for the chapter's "West Texas Product Caravan." This is a week-long, 945-mile, touring table-top display show of products of PC national member companies. It will go from Dallas to Wichita Falls, Amarillo, Lubbock, Midland, Abilene, and then return to the chapter's home base in Dallas.

The full schedule is as follows:

Date	*Hotel*	*Town*
March 6, 1961	Kemp	Wichita Falls
March 7, 1961	Herrin	Amarillo
March 8, 1961	Caprock	Lubbock
March 9, 1961	Scharborough	Midland
March 10, 1961	Windsor	Abilene

Quite a few PC chapters have been traveling recently. For the first time, the New Orleans chapter had a meeting in Baton Rouge, Louisiana, to acquaint Baton Rouge architects with the Council's history and purposes, and the products produced by Council members. . . . In Las Vegas in November, the Southern California chapter had the first joint PC-Las Vegas AIA chapter meeting. . . . An October note from The Carolinas' chapter, based in Charlotte, N. C., said that 52 architects from South Carolina attended the first PC meeting in Columbia, South Carolina. There was also outstanding member attendance—84. . . . The chapters must be trying to keep up with traveling PC President Lundberg, who spoke to the Charlotte chapter's February meeting. . . . The Phoenix chapter has been busy at home and away. In addition to planning for a Tucson meeting, the chapter had a luncheon meeting in Phoenix with 75 architects present, including the entire board of directors of the Central Arizona AIA chapter. . . . The Denver chapter held its first joint AIA-PC dinner dance in December. Attendance totaled 328—115 architects and

their wives; 49 PC members and their wives. The response was so encouraging that the chapter plans to hold the dinner dance annually. Mr. Lundberg spoke on the growing influence of women on the shape and structure of the American city and on all forms of contemporary design. . . . The New York chapter's annual Christmas Party guest list included almost 1100 of the leading architects in the Metropolitan New York area. The chapter's tenth annual New Fellows Luncheon at the Waldorf honoring the newly elected Fellows of the AIA produced the largest turnout in its history—228 members and guests. . . . Portland's new roster is in file folder form and contains: on the front cover—meetings dates and events, officers, and committee chairmen; on the inside pages—listing of member companies alphabetically and by products, as well as representatives' phone numbers; on the back cover—the aims of the Producers' Council. The Products By Classification list is pocket-sized for convenience in carrying. . . . The Toledo chapter's '60–'61 AIA-PC membership roster includes a specification writers' guide which classifies member companies according to the products they produce.

Pittsburgh Wins '60 Silver Bowl

The Pittsburgh chapter of the Producers' Council received the Silver Bowl award for the most outstanding chapter program of 1960 at the annual convention in Chicago in October.

For the first time, Certificates of Merit were given to recognize the high caliber of three other chapter programs—the Detroit chapter's effective educational program, "The Detroit Architectural Sales Representative Institute"; the Kansas City chapter's program resulting in the expansion of chapter influence and effectiveness, "Town Crier and Pause And Chat"; and the Washington, D. C. chapter's effective use of display exhibits, "New Products Carnival."

The Pittsburgh program took the theme "nothing has more value than quality" and encouraged architects in the use of quality as a technique in building for tomorrow.

The chapter held an awards dinner to pay tribute to area architects who consistently use materials and services of Producers' Council members, the architects' clients, and owners of some 78 million dollars worth of industrial, commercial, municipal and institutional construction. This construction accounted for more than 45 million dollars worth of sales and services through Producers' Council members. Some 40 Certificates of Merit were presented these outstanding representatives of the architectural profession for their use and design of quality products. The Consulting Engineers Society of Greater Pittsburgh was singled out for special mention in recognition of the services of that profession in general.

The guest list of more than 300 persons who attended the awards dinner included officials of some of the country's top industries, clergymen of all faiths, directors of corporations, institutional directors, purchasing agents, and members of the press, television and radio.

The Pittsburgh awards program could easily be adopted by all chapters for their own use, or, with proper modification, serve as a guide for similar recognition of architects on a national scale.

Criteria for the Silver Bowl award include originality, adaptability, degree of interest generated, member participation, and tangible results.

Some of the tangible results of the Pittsburgh program were:

1. Enthusiastic response from architects as indicated by letters of appreciation. Full page coverage was given in the official publication of the Pittsburgh Architectural Club.

2. Good press coverage by the city's daily papers.

3. A gain of 14 new chapter members as a direct result of the program.

4. Clients' and owners' appreciation of the honors paid their buildings which a number of them showed by having the certificates framed and put on display in their award-winning buildings.

The Silver Bowl—a replica of a Paul Revere original—has been awarded annually since 1952.

Accepting awards for their chapters in the '60 Silver Bowl competition are chapter presidents (from left to right) James D. Hailey, Pittsburgh, Silver Bowl; O. Robert Armstrong, Washington, D. C., Leland H. Dalgleish, Kansas City, and M. Eugene Hannum, Detroit — Certificates of Merit.

Plate No. 417

New mounted tile cuts installation costs! Architect George J. Dippell specified American Olean's new Master-Set® and Perma-Bak® sheet mounted tiles for these school corridors, and in the washrooms as well. ■ The result —substantial savings in labor costs and in bonding materials over conventional installation methods. ■ Write for descriptive folders on Perma-Bak and Master-Set.

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New Trends in WOOD PRODUCTS

By **Herbert B. McKean,** Director of Research, Potlatch Forest, Inc.

Growth of Wood Research

When covering the subject, "New Wood Products and Product Development Trends", consideration should be given to those agencies concerned in developing these new products. Going back into history of the previous century, it is undoubtedly true that the first development of new products was under the Federal Government by the forerunner of the present Forest Products Laboratory.

The U.S. Forest Products Laboratory was located in several universities beginning about 1890–1900. In 1910, it was consolidated in Madison, Wisconsin. The Forest Products Laboratory celebrated its golden anniversary in Madison last June.

Beginning in the 30's, some of the universities began to do a little work in forest products research. Some of the states, particularly Texas, established a Forest Products Laboratory about 1937 or 1938, but there was not a lot of intensive development in the field of forest products outside of the Forest Products Laboratory until after World War II. Since that time, however, there have been rather exciting developments. A lot of effort has been expended to make wood serve people in an ever-improving fashion.

Since World War II, the universities have added greatly to their forest products research. All three of the West Coast states, just as an example, have very important, worthwhile activities going on in state-supported institutions.

The forest products industry itself has also become active in the wood product development field since World War II. The industry had done some product re-

search prior to the War, however, particularly on paper, hardboard and softboard.

The lumber industry as such, had no major laboratory supported by private industry prior to World War II. Since that time, however, and more particularly since 1955, the number of laboratories developing new wood products has increased rather strikingly. There are at least two dozen lumber firms engaged in developing improvements in wood products.

From these efforts of a number of companies and state and federal laboratories, a number of new products have been developed.

Only a portion of the new products recently introduced or still in the laboratory will be covered here, and most of the products that will be discussed have been developed since World War II, many of them since 1955.

Chemical Utilization

The first subject to be covered is chemical utilization, paper being one of the best known end products. At least 90% of the paper produced in this country is made from wood fiber. Not so well known is the fact that in many sections of the country, particularly on the West Coast, the pulp and paper industry now is based very largely on the use of sawmill residues.

Most of the pulp mills in the Lake States have a large wood room where pulp logs are brought in to be barked, chipped and screened in preparation for pulping. In the Potlatch Forests, Inc. mill at Lewiston, Idaho, there is no wood room. Approximately 20 railroad carloads of chips are hauled from surrounding mills into Lewiston each day. The P.F.I. sawmill at Lewiston provides about 30 to 40% of the chips needed to produce the 700 tons of pulp per day. About 14,000 units (200 cu. ft. per unit) or roughly the equivalent of 14,000 cords of wood are used each day—all sawmill residues.

Another thing that is being done by the pulp and paper industry, particularly since the end of World War II, is to accept and use chips that are not uniform in size and shape. Previously, chips had to be cut precisely to width, thickness and length. Some West Coast mills have found that random sized chips and even sawdust can be used for certain purposes. For example, paper used for food packaging does not require the strength of some end uses but does require a good printing surface for good merchandising. The short wood fibers found in sawdust, (when mixed with chips) produces a denser, smoother paper surface for better printing than paper produced from all long fibers from chips.

A second new product from chemical utilization is a thin hardwood flooring that may soon be placed on the market. This is one approach to competing with the concrete slab floor that is now found in 40% of the homes insured by F.H.A. Considering an average house of one thousand square feet (a conservative figure), the lumber industry in just three items—finished floor, sub floor and joists—has lost annual markets of 1.4 billion board feet to slabs.

"Rigid frames" support the roof, each frame including the two posts at each end as well as the two rafters all combined into one unit and completely assembled on the ground. The eight frames were erected and plumbed in 1 ¼ hrs. by two men and a crane with an operator. Roof sheathing: 1 ¼" Plylumber.

A veneer, treated with a resin to stabilize and harden it, is one man's answer to this concrete problem. The treated veneer is sanded on one surface so that it can be laid on the slab in exactly the same manner as linoleum, tile or vinyl.

Another item to be considered under chemical utilization is a product developed by the Forest Products Laboratory prior to World War II. Called Staypak, this is a densified wood that provides a very good wearing surface. A half inch thick board is pressed under the proper conditions of moisture content and high temperatures to produce a high wear-resistant product.

One factor that has kept this product from becoming very popular is the problem of knots, which cannot be compressed. A procedure is being developed at P.F.I. that may solve this problem by compressing the surface of the board instead of the entire board. This procedure may also prove to be helpful in improving the dimensional stability of wood.

One other item under chemical utilization is factory finishes being developed by the lumber industry. One of the reasons P.F.I. became interested in factory finishes is that in the home building industry, tract builders are now finding that painting labor is costing as much or more than carpentry labor. Therefore, builders are looking for ways of reducing the cost of painting. Potlatch Forests wants to help reduce this cost of painting and also get a better painting job than the average painter is able to do on the construction site. A paint life of 10 years is the goal.

Glued Products

Potlatch Forests, Inc. has been making laminated 2 × 4's by a so-called preheat method for about four years. This product is produced by heating the surfaces of two 1 × 4's, quickly covering the two heated surfaces with

Installation of Plyplank on an office floor. The joists are 3 × 6's and spaced 32" on center. The tool in the center of the picture is one developed by Potlatch Forest, Inc., Research to bring the Plyplank pieces together so as to provide a tight joint between adjacent sections.

glue, promptly bringing them together and pressing them. The heating period will run from 60 to 90 seconds and the pressing period from 50 to 75 seconds. Thus, two pieces of lumber can be put into the machine and come out as a fully water-proof and fully cured laminated 2 × 4 about two minutes later.

Lock-Deck is another P.F.I. laminated product. Waterproof glues are used to laminate three layers of wood, with the center layer offset to form a tongue and groove. Available in 6 inch and 8 inch widths, it is essentially an industrial product being used quite widely for industrial and commercial construction. One of the biggest advantages of this product to the user is the rapid application. As much as 50% savings in application time is possible with Lock-Deck, compared to solid decking.

An unique glue curing method is used for the product. Electronics have been used for curing waterproof or exterior type adhesives for some time but not for this size material. Heretofore, a glue line more than 4 inches wide could not be cured by placing electrodes on either side of the glue line and forcing electronic power through the line in a parallel direction. Lock-Deck has a glue line five inches wide and it, as well as P.F.I. laminated beams up to 12 inches wide, is made by using high frequency parallel bonding.

Perhaps the biggest advantage of this process over the preheat method is the smaller glue cost.

Another process, still in the laboratory, is based on the preheat technique. This approach is being developed by Washington State University, with efforts to make multiple lamination beams. A press, having considerable potential, has been developed at the University. The press is loaded by alternating wood and hot plate until the desired number of layers has been reached. After a heating interval of about five minutes, the hot plates are removed and glue in the form of a paper film is quickly inserted into these vacated spaces. The whole press is then closed.

Another process, being worked on by the Washington Iron Works in Seattle, has the potential of being the cheapest one of all. The Washington Iron Works conceived the idea of making a continuous press based on the preheat principle. Boards will enter the press, be heated while moving, receive an application of glue and emerge from the press as a fully glued timber.

Considerable work is underway to use short sections of lumber to make long boards. The conventional method is a scarf joint but it is somewhat wasteful of wood. One type of finger joint uses about one inch of the board's length compared to 24 inches for a scarf joint in a two inch board. Another type of finger joint, made by Timber Structures of Portland, Oregon, requires about five inches of length in a two inch board, compared to the 24 inches for a scarf joint. This is almost a 75% saving of wood.

A third type of finger joint will save even more lumber but is still in the laboratory stage. Only ¼ to ½ inch long, these joints are made in a rather unique procedure, similar in many respects to the principle for making Staypak. Boards having a certain moisture content are heated and placed under pressure to press the fingers into the end of each piece. These joints are showing values of 90 to 110% (based on the strength of clear wood) when tested for tension and bending strengths.

Another glued product available from Potlatch Forests is Plylumber. This product is produced in a manner similar to plywood. It is a 3-ply material with the center ply running at right angles to the facing plys. Plylumber has some of the advantages of plywood, due to the cross ply, but has the major advantage of availability in any length.

Plylumber is perhaps one step in the direction of a roof sheathing material that will not swell or shrink under changing moisture conditions and which could be sprayed with a waterproofing material to make a considerable cut in the cost of roof structures.

Plylumber used for roof sheathing has a total thickness of about 1¼ inches while that used for sidewalls is about ⅞ inch thick. A building was recently erected in Lewiston, Idaho, using this material in precut form. A wall 14 feet, 10 inches high was closed in by three men at the rate of 60 linear feet per hour.

A similar P.F.I. product, Plyplank, should cut down the time required to install a hardwood floor and may be a partial answer to the competition of concrete slabs. Plyplank has a softwood back, a center cross ply of softwood and a hardwood face to make it a combination subfloor and finish floor. This material is available in any lengths, but 16 feet is the most common.

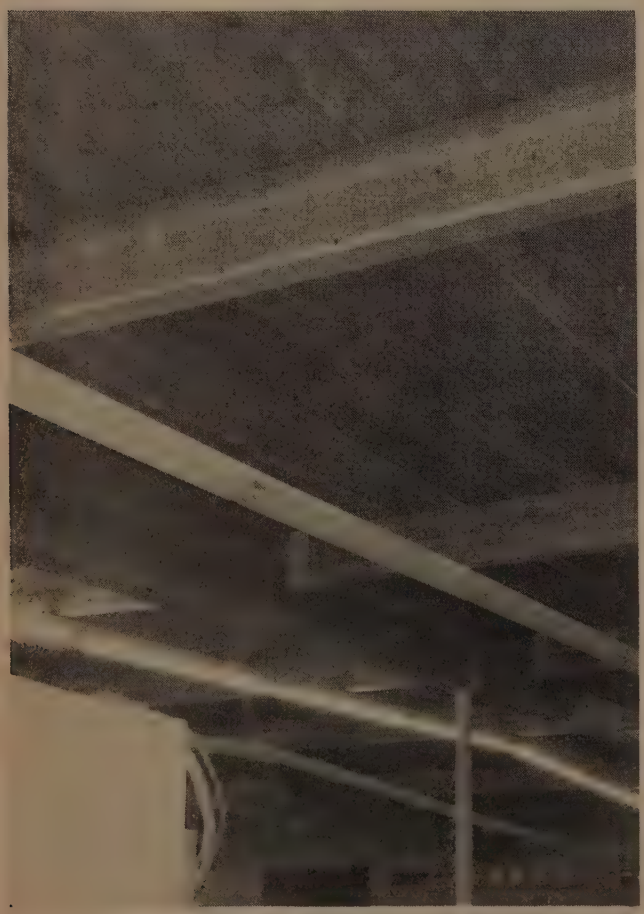
Trofdeck, developed by the Douglas Fir Plywood Association, is being used on the West Coast as a roof material. It is made by fastening sheets of plywood together in a V-shape, giving it a very high moment of inertia and consequently, the structure can span good distances supporting a fairly heavy load. Trofdeck, when

used as a roofing material, serves both as the sheathing material as well as the structural element. This product requires some site gluing, which perhaps may hold back its popularity to some extent.

An interesting product available in some areas is a stressed skin panel that is finding rather rapid favor in many types of structures. The panels are made with foamed plastic centers and plywood faces. Another type uses wood products completely but is less well developed and less widely used. In this case, a paper center holds the skins apart.

Another product being developed is laminated bowling alley plank. In this case, high quality southern pine of special properties for wearing surface is glued to lower grade pine. Comparison of a regular bowling alley plank of southern pine, 1 inch wide and 3 inches thick with a laminated plank will show that the upper section of the glued product is equal to that of the solid plank. The lower portion is lower grade but will do its job just as well. Laminating is a reasonable approach to making high quality bowling alley stock go a lot further.

Considerable amounts of money have been saved each year by Potlatch Forests, Inc., following the development of a plywood paper roll plug. The Company had been experiencing difficulties with rolls of paper collapsing during shipment before the problem was solved by building up plywood in fairly sizable thicknesses and then cutting out the plugs on a specially designed lathe.



Supermarket roof constructed of laminated beams and Lock-Deck, the same material shown in the photo at top of article.

Plyveneer, a Weyerhaeuser Company product, is a sheet of veneer covered on both faces with paper. It is a very good sheet material for jobs with a primary requirement of covering space. It has some strength, but low stiffness. It is inexpensive and will do a good job of coverage.

Efforts are being made to overcome the problem of face checking in plywood and at the same time provide a better base for painting. Plastic sheets are being used for this purpose.

Reconstituted Wood

Reconstituted wood is the material derived by chipping or flaking wood and then putting it back together generally with resin binders. There is a wide array of particle boards being developed or on the market at the present time. Some are made from wood chips, wood and bark, bark and needles, wood chips with an overlay of paper or wood veneer and many others. One product, not yet in commercial use but showing considerable potential, is made from bark without adding any resins or other chemicals. It is being developed by the Oregon Forest Products Laboratory.

Fire-Proofing

Another aspect of particle board is that fire retarding chemicals can be added to the formula of the material to make it fire resistant. Such a board is now available on the market.

Another fire-proofing idea works well with Plylumber. An asbestos sheet is glued to a piece of Plylumber to make it a fireproof material. Fire tests conducted with this material have indicated a good potential for this product.

Nondestructive Testing

A development of major importance to the lumber industry is nondestructive testing of dimension lumber. The industry is interested in providing its customers with a better knowledge of just what they are buying. There are three different approaches being made in attempting to solve the problem of testing lumber without destroying it in the process. Washington State University is working on a Sonar machine that may be able to measure both strength and stiffness. The Battelle Memorial Institute of Columbus, Ohio, is considering an electronic approach. Potlatch Forests, Inc., has developed a procedure of quickly measuring the force required to bend a piece of wood a pre-determined amount. The two values, force and deflection, are instantly shown electronically as a stiffness value which can be stamped on each piece as tested.

This paper, having covered only a small number of the new products now available or still in the development stage, has been intended merely to illustrate the activity in the field. Private industry, state and federal organizations are spending considerable time and money to find ways of making wood serve people better.

By **National Paint, Varnish & Lacquer Association**

new Paint products

The paint industry is one of the oldest industries serving the building trades and, at the same time, it is one of the newest. Ever since man began to use wood or metal for construction he has needed to decorate the surfaces and protect them from the elements. Paint is older than recorded history. At the same time, the paints available today are as new as any material used in building. At least 80% of the products offered today are different from those available five years ago and fully 95% were developed since World War II.

With such an array of new products coming on the market, it is difficult to cover them all, but several of these coatings are sufficiently different from anything that was previously available to justify special mention.

Water-Thinned Paints

The obvious advantages of water as a paint thinner have attracted the attention of paint technologists for many years. Its low cost, freedom from odor, ease of clean-up, and resistance to fire have all operated to stimulate interest in its use. Even the fact that the films were water-sensitive and had poor exterior durability did not completely prevent the use of water-thinned paints. However, it was not until World War II made the "latexes" of the synthetic rubber industry commercially available that any significant progress in the use of water-thinned paints was made. These latex paints acquired water resistance rapidly and set new standards in resistance to free lime, ease of application, and brightness of colors. Although they were still deficient in exterior durability, their impact on the interior painting field was great. Later types with some exterior durability were developed and became one of the most practical paints for exterior masonry. It is, however, only within the last couple of years that water-thinned paints which retained the flexibility well enough to be suitable for application to exterior wood have been developed.

Part of the delay can be accounted for by the fact that there is no substitute for long term exposures for determining the performance of paints on exterior wood. No accelerated laboratory test, which will give the answer in months instead of in years has ever been developed and, before these paints could be marketed with confidence, by reputable manufacturers, years of testing them when applied to panels on test fences and on actual houses, must be carried out. All this takes time but, after satisfactory paints have been proven by test and are available in the market place they may be used with confidence.

Water-thinned paints that are suitable for use on metal are still in the development stage. Such coatings are in use in the factory finishing of various items, such as certain parts of automobiles and kitchen appliances, but suitable materials for on-the-job application are not yet generally available.

Catalyzed Finishes

Where the absolute maximum in properties such as water-resistance and chemical-resistance is required, newly developed coatings, based on epoxy, urethane, or polyester resins are coming into the picture. They set standards of performance where extremely high resistance is required, in some cases approach the performance of ceramic tile at a fraction of the cost and with much greater flexibility as to uses. These finishes are made available as two-package systems, with a catalyst or activator which must be added just before application. The pot life of many of these products is limited, and application may require special techniques, but by using them, effects may be achieved that have not been possible with organic finishes up to now. Each of these classes of finishes represents a general type and the properties can be varied over a wide range, depending upon the end use contemplated. Many of the materials are still so new that their exact place in the coatings field has not yet been determined.

Where the ultimate in performance is not required, modified forms of these finishes, which are one-package items and which may be applied by the standard methods of the paint industry, are available. While they do not give the performance of the catalyzed finishes, many of these one-package products are superior to previously available coatings, and produce superior finishes for many purposes.

Among the coatings to which these products are adapted are floor and deck enamels, coatings for walls

and ceilings of food-packing establishments, coatings for pre-finished building components, and maintenance coatings for chemical and other paints. Most of these finishes do not yet have enough history to be sure of their durability over a long period of time, but suitable exterior finishes will, no doubt, be forthcoming in the near future.

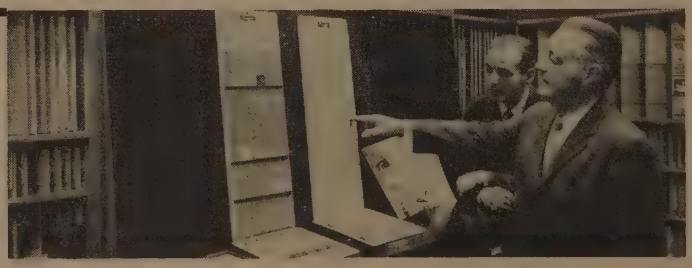
Multicolor Lacquers

Coatings which produce more than one color in a single application have been discussed by the paint industry for many years. The "barberpole" or "checkerboard" paints were always good for a laugh. Now, however, thanks to a blend of emulsion and lacquer technology, we have paint that produces a patterned surface in two or more colors with a single application. The patterned surface does not show dirt or marks readily and disguises surface imperfections, making these coatings excellent for public rooms such as corridors, school rooms, entrance halls, etc. Again, the development of coatings with the type of exterior durability required for many purposes awaits the results of long-term tests, but they may be expected in the near future. At present most of these coatings are designed for spray application, but types suitable for application by brush or roller have also been developed.

These three examples of new developments show the directions in which the paint industry is moving. However, they all have one point in common, which must be taken into account if the type of performance of which they are capable is to be obtained. They are significantly different from the coatings previously available and must be handled in a different manner. It is desirable, in the use of any coating, that the manufacturer's instructions as to its use be followed, if the best performance is to be obtained, but in the case of these newer materials it is imperative. These are not slightly up-graded versions of standard products, to be used in the same way as are the products to which we are accustomed. These are brand-new materials and must be used in the way for which they are designed if satisfactory results are to be obtained. Instructions as to surface preparation, application, and curing must be followed implicitly. Sometimes it is not easy for workmen with long experience to do this *but it must be done.*

The three examples treated at length do not, by any means, exhaust the developments in the paint industry. Colors are brighter and cleaner than previously and resins are better adapted to the end-use required. Newer solvents have less odor than those previously used and are tailored for the desired results. Paints apply easier, level better, have higher gloss, hide better, and last longer than previously. The standards set by the industries' products are continually being surpassed, and what is, today, an exceptional product will be commonplace tomorrow. Experimental coatings are in the laboratories which, after suitable testing will be available to do jobs that either cannot now be done by paints or else are not done as well as we would like. In the near future we can look for even better paints for our current every day use and new coatings for those surfaces which now are advertised as not needing paint, usually because they are difficult to refinish when damaged or when a coating of color is required.

American Olean's Tile Showrooms



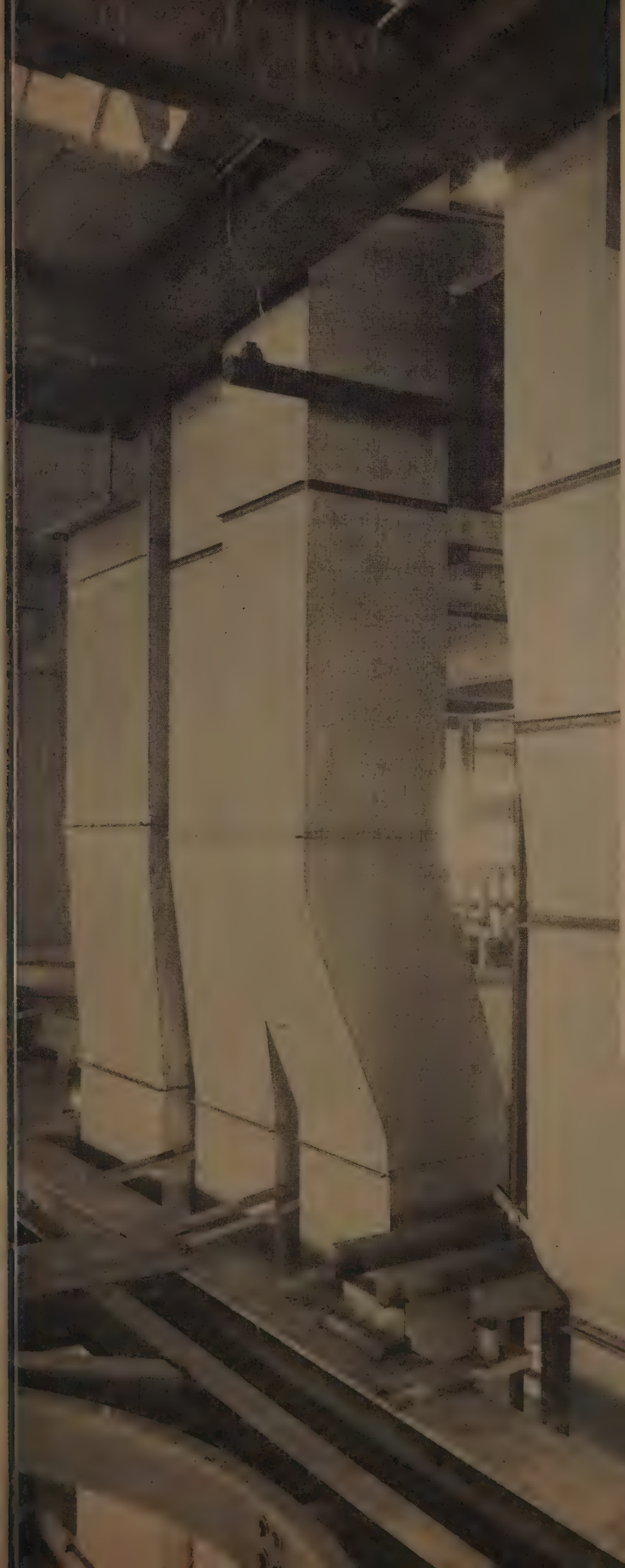
Features of American Olean Tile Company's newly remodeled showrooms at 101 Park Avenue, New York City, include a private workroom for architects and designers where special facilities are provided to assist them in developing original ceramic tile installations, four separate display rooms in which customers may choose their tile, and controlled lighting throughout the showrooms. The showrooms were designed by Goldstone & Dearborn.

In the architects' workroom, the professional may work privately or with American Olean color consultants if he so desires. Samples of all the shapes, sizes, textures, and colors of American Olean ceramic tiles are at his finger tips. Specially-designed desks make it easier for him to assemble the tiles into an infinite variety of patterns. Thus he has the advantage of actually being able to see a panel of his particular design assembled before him, or to compare several proposed designs side by side. Relative color tones and qualities can be evaluated side by side, and changes can be made quickly to achieve any desired effect.

In addition to custom-designing facilities, this room has on display hundreds of smaller panels with standard American Olean ceramic tile patterns—glazed, unglazed, and quarry tile—mounted for easy viewing.

In the customers' display rooms, trained color consultants are on hand daily to help with selections.

The controlled lighting used throughout the showrooms enables the tile colors to be seen in any type of light desired—incandescent, fluorescent, or natural light. Lighting conditions for any given building thus can be duplicated in the showrooms so that the final color and appearance of the installed tile in the finished building can be simulated accurately.



NEW DESIGN USE

Exterior Air Ducts

BY **Wheeling Steel Corporation**

A new concept in architecture and engineering d sign is expected to give the owners of the new Time Life building $150,000 more annually in value of rent space.

What is so markedly different is that the vertic risers are outside the steel framework of the building, i cluding the spandrel beams. Some 60 of these exterior a ducts rise to the full 48-floor, 587-foot height of th building.

Putting them on the outside of the structure mad it possible to supply 15,000 square feet more floor spac and to provide exterior walls unmarred by the offse which interior risers would have inevitably meant.

Before the architects and the engineers decided t develop this new design, they had to satisfy themselv that there would be no condensation problem, that th air conditioning ducts would be strong and durab enough to last for the century or longer economic life the building; that the ducts could be easily encased wi ornamental architectural material, and seem to be an e sential part of the Indiana limestone and glass facade.

Rockefeller Center's Time & Life Building. Some 60 exterior air ducts rise to its full 48-floor, 587-foot height.

The enormity of the problem is evident in that the risers are exposed to both below zero and 90 degree plus weather, and that they had to be absolutely air tight. Leaks which would be relatively harmless if they were on the inside would be fatal on the outside. In addition they had to be absolutely straight up and down, in order that the ornamental architectural material could be installed so as not to mar, but, rather, beautify the great new tower.

These needs were satisfied by the utilization of galvanized steel and efficient insulation. There is an inner welded duct of strong 18 gauge galvanized steel; three-fourths of an inch of fiberglas insulation; then a second and outer layer of 26 gauge galvanized steel.

Then there is an air space, and an ornamental architectural enclosure.

Some 300 tons of galvanized steel went into the air duct system. Most of this was Wheeling SofTite, used by Triangle Sheet Metal Works, Inc., the subcontractor.

The total length of these special insulated galvanized steel risers was in excess of five miles, there being more than 2500 twelve-foot sections.

While the building has numerous features of great architectural interest, the air conditioning duct system is perhaps the most daring innovation.

The architects, Harrison & Abramovitz & Harris, and the engineers, Syska & Hennessy, Inc. studied various schemes prior to deciding to utilize the exterior air risers. After the decision was made the architect and engineer were confronted with diverse and new problems to design this type system to suit the architectural and engineering requirements of the building. A full scale mock-up was made to enable the owner, architect, engineer, and contractors to evaluate the problems which would be involved to properly and efficiently install these risers.

Triangle helped supply some of the needed solutions to the erection problems created by the risers being on the exterior of the building.

Automatic and semi-automatic welding was used because it increases the duct's life expectancy, as compared to caulked metal sections. In addition butt welding with an automatic seam welder was employed along with neoprene gaskets between the flanges of the sections, which are bolted together with high-tension bolts. After the exterior ducts were installed, they were tested before the mullions were finally secured over them, sealing the system permanently.

As is often the case on a large building, some unforeseen cause creates a delay. Due to start in June, 1957, erection of the shop prefabricated risers did not start until October. So three sided metal shields were furnished outside workers. An intercommunicating phone or radio system was used to keep in touch with each of the outside workers. A winch on top of the roof hoisted the sections of duct into the exact position required. Bolts with wing nuts were used to fasten the 12 foot riser sections together; this resulted in great savings in time, for fingers got cold and stiff despite the electric heaters furnished the outside workers.

To guard the safety of workers, they were equipped with an industrial version of a parachute harness. Cables attached to their persons prevented any high falls. To keep tools from falling to the ground, and injuring people there, they were chained to the workers' belts.

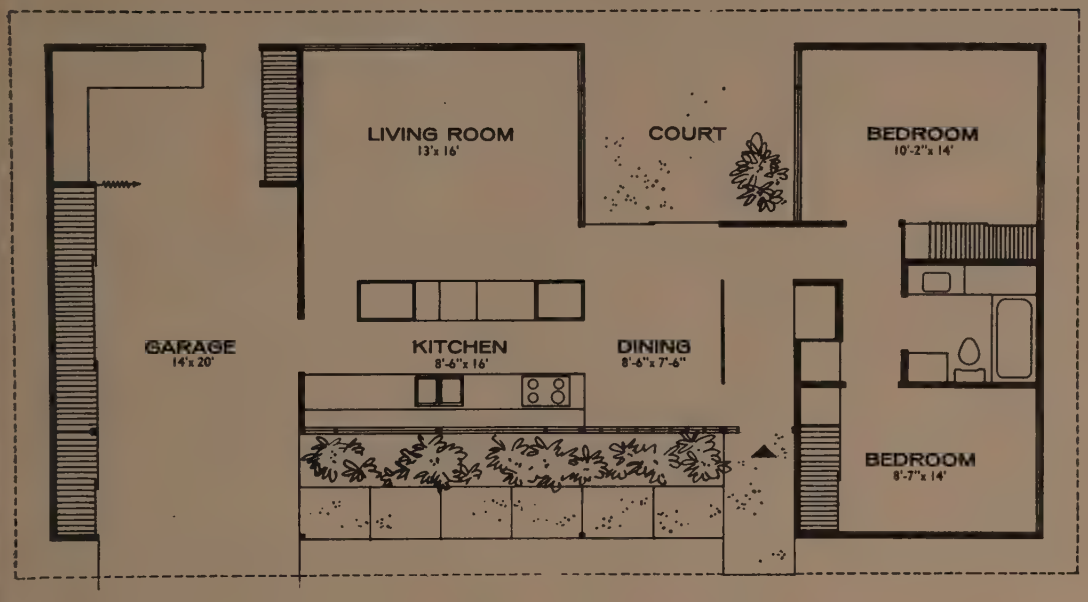
The conditioned air, which comes from large built up fan units on the tenth and thirty-fifth floors, goes through the ducts at velocities as high as 4,000 feet per minute, 44 miles per hour. These outside ducts furnish all the air necessary for neutralizing the undesired summer heat which comes through the exterior walls of the building. The same ducts supply warmed air for the fall, and spring.

The ductwork systems used in the high pressure air distribution system of the new Time & Life Building include more than 300 tons of galvanized steel sheets. There are 153 fans on the job, serving between 60 and 70 individual systems.

The new Time & Life Building is located just opposite the Radio City Music Hall, in Rockefeller Center. General contractors were George A. Fuller Company and John Lowry, Inc., a joint venture. The heating, ventilating and air conditioning contractors were Almirall-Wolff and Nunier, a joint venture.

BY **Douglas Fir Plywood Association**

HOUSE OF FREEDOM



A project praised as "the first national breakthrough in retirement housing" demonstrated in Washington in January that a compact, low-cost home can be built to meet the specific housing needs of the elderly. Called "House of Freedom" by the three nonprofit organizations that developed it, the model demonstration home was built for evaluation by the delegates to the White House Conference on Aging. The purposes of the project were to focus national attention on improving housing for the elderly, and to stimulate better low-cost housing programs by private builders and public agencies.

House of Freedom was designed and built by the Douglas Fir Plywood Association. Its architect was Robert B. Waring, DFPA, in consultation with a special committee of nine leaders and specialists in housing and problems of the elderly. Joining DFPA in sponsoring it were the National Retired Teachers Association and the American Association of Retired Persons, with a combined membership of nearly 500,000.

Housing for the elderly has been termed "one of our most important needs and one of our most promising markets."

For many of those over 60, the houses in which they have lived most of their lives become obsolete—their maintenance is a physical and financial burden and they may even be dangerous because of stairs and other hazardous areas. In one survey, 66 percent of those persons over 60 who were interviewed said they would like to move to better housing if they could find it. But fewer than 10 percent had a desire to move to a new community. Thus the retirement housing market is a local one everywhere.

The United States Bureau of the Census estimates that there are now 16 million Americans over 65. Most of these men and women are retired from income-producing jobs; most have some regular income, which is usually fixed and less than when they were working. More than half of those 65 and over must live on annual incomes of less than $1,000. Families with heads 65 and over have an average income of $2,670, which includes funds contributed by younger members of the family. "Lack of financial resources is the deeply rooted, central cause of most problems of the elderly," it was pointed out during the Conference.

When House of Freedom was opened, Donald A. Jaenicke, special projects director for DFPA, said "This house is a kind of melting pot of proven design ideas for elderly housing. It sums up the best available research in this field, and it has been carefully thought out with a view to making a house a pleasant place for retirement rather than an expensive, tiresome burden. Why is it called House of Freedom? Because it is designed to provide freedom from household drudgery, from poor lighting, from dangerously slick floors or stairways; from excessive housing expense."

House of Freedom is in no sense a house designed for handicapped persons—most of the elderly are healthy and resent being considered "handicapped." Nor are its advantages limited to the elderly—young families would delight in its easy-to-live-in-quality. However, it does have specific features designed to make life easier for the aged. They include:

- All doors and openings are 3′ wide, while hallways are 4″ wider.
- An eave overhang of 3′–3½′ shades the entire house perimeter.

• The house has no steps or changes of level.

• Electrical outlets are 18″ from the floor to eliminate stooping.

• Light switches and doorknobs are 36″ from the floor for convenience.

• Master light switches are located near both entries and in the master bedroom (one of two bedrooms) to make it unnecessary to move about in the dark.

• Dim areas are eliminated and higher-than-normal levels of light are produced by lights which are arranged for uniform illumination.

• Bulb replacement is simplified by pull-down kitchen light fixtures.

• Low-maintenance surfaces are used extensively and no window surfaces are higher than 6′8″ from ground level.

• The garage's hobby area can be used as a storage room.

• A seat near the tub makes bathroom dressing more convenient.

• Grab-bars give protection against falls in getting in and out of the tub.

• Floors are nonskid and low-upkeep.

• Every room's floor is warmed by perimeter heat.

• Plenty of knee room, and low counters, sink and stove top make sit-down kitchen work possible and comfortable.

• All but a few kitchen cabinets can be reached from a sitting position and all storage space is planned carefully to eliminate inaccessible corners.

• The house's lavish storage space is arranged efficiently; one living room wall can be taken over by shelves for display of books or other possessions.

• Outdoors, all water faucets are at least 24″ from the ground to protect shrubs, eliminate stooping, and minimize frost danger.

Two bedrooms, living room, separate dining room, modern "sit-down" kitchen, and bathroom are included in House of Freedom's 888 sq. ft. of living space. The garage with its special hobby room provides an additional 392 sq. ft.

A glass-walled court that separates the living room from the master bedroom characterizes the design of the house. The window arrangement around the courtyard adds spaciousness and a pleasant view to living room, dining room, and master bedroom, and permits seeing from one room to another if desired—if one family member is ill or bedridden, for instance. Although the court is the distinguishing feature of the house and involves little cost, it can be eliminated or closed in if desired.

Two considerations determined the layout of the rooms—ease of traffic flow and creation of a feeling of spaciousness. Although the House of Freedom exterior is almost blank, within the private area of the house nearly every area can be open.

The basic house is designed to cost about $9,000, plus land. The demonstration house itself was built to show the possibilities of the design and a comparable private home would cost more than $9,000. It probably would be possible to reduce the cost to about $8,000 if the garage and hobby room were eliminated and if the roof treatment were adapted to trussed rafters instead of the open beam ceiling used in the demonstration model to give a more dramatic effect and a feeling of spaciousness. The house's cost would vary with local costs and would also depend upon the style of the design and the method of construction.

The style built for the demonstration house had an Oriental influence, but the exterior could be modern, traditional or New England, or any of several other styles.

Labor is one of the most important factors in building costs today. The construction techniques available in House of Freedom can reduce on-site labor, the most expensive kind, to a minimum. Because wood construction is used throughout, the basic plan is adaptable to a number of cost- and time-cutting plywood building techniques. In the demonstration model, the builder fabricated entire plywood wall sections and then just tilted them into place.

Other possible methods of construction include panelization, in which walls, floors, and roof can be assembled from preframed components of specific thickness and types of fir plywood; and componentization, in which even larger "building blocks" go together at the site after being assembled under factory conditions. In all methods, a single thickness of fir plywood acts as both sheathing and siding and thus eliminates one whole building operation.

Four basic alternates are possible in floor construction. All utilize the large size and strength of full-size plywood sheets, and are more economical and more practical than old-fashioned methods. They are: Insta-Floor, in which preframed 4′ × 8′ panels are simply fastened in place over girders 4′ apart; 2.4.1 Tongue-and-Grooved panels, 1⅛″-thick plywood that acts as both subfloor and underlayment over the same girder system; stressed skin panels, "sandwiches" of two plywood layers, with heat ducts and lumber framing between; and conventional plywood subflooring and underlayment, which was used on the demonstration model. The single-thickness plywood combination subflooring and underlayment goes down right over floor joists. Tile or rugs are laid directly on top.

House of Freedom is a flexible design which could be adapted into a duplex or triplex unit, fourplex garden court apartments, or built in quantity to comprise a complete village or community.

The demonstration model was not built to be sold and is not available for sale anywhere in the country. It was built to be evaluated by the delegates to the Conference. They were conducted through it and given questionnaires to complete regarding their opinions of its features and construction. Eventually construction plans will be obtainable. However, "we realize this house isn't necessarily the final answer, and it may be changed somewhat before construction plans are made available," Jaenicke said.

BY **Leonard Kirsten**, Director of Public Relations, Structural Clay Products Institute

The Significant "SCR Building Panel"

Being the manufacturers of a quality building material in continuous widespread use for the past 8,000 years is not in itself all that is required in the rapidly changing construction world of the second half of the 20th century. That is the conclusion reached years ago by the nation's makers of brick, structural tile and architectural terra cotta. It was one of the major ideas behind the formation of the industry's research arm, the Structural Clay Products Research Foundation, a decade ago.

One of the most significant developments from among the many which have been developed in the brick and tile laboratories is the "SCR building panel,"[1] a prefabricated structural ceramic panel.

Previously used successfully in the construction of a residence and a small industrial building, the panel has just been used in its first major commercial application—the Hirsch Clothing Company in Chicago. Architects for the building are Camburas and Theodore, AIA, of Chicago.

Basically, the "SCR building panel" is a two and a half inch thick prefabricated clay masonry wall panel. Cast in a jig with a quick-set grout, the clay units are reinforced with deformed rods.

[1] Reg. T. M., Pat. Pend., SCPRF

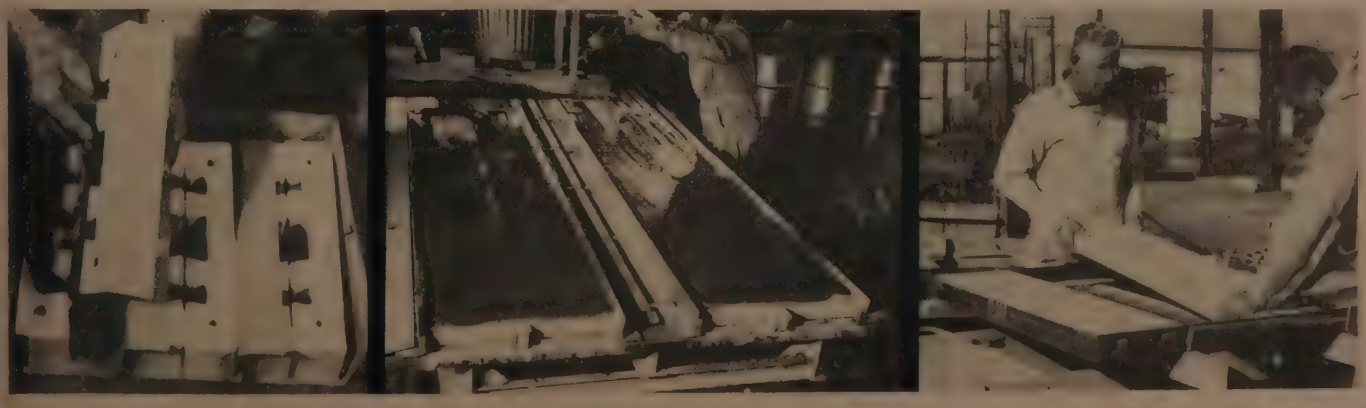
Esthetically, the panels may be cast with a wide variety of colors, textures and individual clay unit face sizes. No matter what the clay unit size, the panels will be one unit wide and can be cast in standard individual panel widths ranging from 12 inches to 24 inches and in lengths up to 13 feet. Special widths less than 12 inches can also be made available. As with conventional clay masonry units, the colors and surface finishes as well as individual unit sizes vary with the manufacturer or fabricator. In any event, the designer has available an almost unlimited pallet of ceramic colors and surface finishes.

The physical properties of the "SCR building panel" are those required of any modern exterior building skin. The panel is designed to resist 30 psf wind pressure and it has a two hour rating for fire resistance with one inch of vermiculite plaster applied directly to the back of the panel. Even higher ratings are possible with furred spaces or thicker plaster, for example.

As for acoustical resistance, the panel, with a density of 25 to 30 psf for a two and one-half inch panel, has been measured as having an average TL loss of 45 db.

The typically dense qualities of clay products provide a water impermeable panel surface.

LEFT. The basic unit in the "SCR building panel" is 12" × 2¼" in face dimensions and 2½" thick. CENTER. The basic clay units have been set in place in a jig for casting into the building panel. Steel reinforcing rods have been put in place and a quick-set grout is being poured over the units. The panels will be sufficiently hardened to be moved in about 15 minutes. RIGHT. Workmen at the fabricating plant of the mason contractor for the Hirsch store installation place the 1' × 4' "SCR building panel" in the steel frame where it will become part of a plate girder containing 19 such panels.



Research tests have shown that the panel has a durability of 50 years. Maintenance on the panel itself requires only truckpointing of the vertical field joints every 35 years and recaulking of the control joints every eight years.

The Hirsch building in Chicago contains 2,052 square feet of individual panels incorporated into 27 pre-assembled "plate girders" four feet wide and 19 feet high. The plate girder concept was used here for the first time in clay masonry.

Each girder contains 19 factory cast panels one foot wide and four feet long. The panels, which are steel reinforced, were fabricated with aquamarine ceramic glazed structural clay units measuring 12 inches by two and one-quarter inches in face dimensions and two and one-half inches thick.

With the plate girders in place, they form a folded-plate or "saw-tooth" wall 19 feet high with the individual panel units forming a soldier course stack bond. The contrasting wall at the street corner is white glazed brick laid in a conventional manner.

Use of the "SCR building panel" on the Hirsch building will provide a thinner wall at lower cost than the special masonry wall originally considered, according to SCPRF Director Robert B. Taylor. He explained that the architect originally specified a saw-tooth brick-faced wall which, because of its 19 foot height, would have required a minimum 12 inch thickness. Due to its design, the wall thickness at the points of maximum projection would have been more than 16 inches.

In addition, bricklayers would not have been able to lay brick to a line, but would have had to constantly use a level and measure. However, use of the prefabricated "SCR building panels" assembled into structural plate girders allows a solid masonry structural wall only two and one-half inches thick. Tests show such a wall assembly is more than adequate in resisting the required wind loads over a 19 foot vertical span.

While no final cost figures are available yet, preliminary estimates indicate that this semi-structural application of panels will cost less than the special masonry wall originally planned or any other type of thin non-structural panel, Taylor said.

The assembly of the panels into large plate girders was done in the fabricating plant of Fred Beyer, a Chicago mason contractor. The clay industry research staff has the full cooperation of the Bricklayers, Masons, & Plasterers' International Union and the Mason Contractors Association of America in its development of the field application of this new masonry concept.

The clay units for the Hirsch job were manufactured by Metropolitan Brick, Inc., Canton, Ohio, a member of the Structural Clay Products Research Foundation.

Following the successful application of the "SCR building panel" on the Hirsch installation, the brick industry hopes to have units for the panel in significant production during 1961.

Structural ceramics in the form of wall plates or panels, floor and roof "planks," shear walls, arches, girders, etc. has occupied a most important place in the long-range objectives of the Structural Clay Products Research Foundation since its beginning some 11 years ago. The "SCR building panel" is the first tangible result of this type of research and development. Structural ceramics, as exemplified by the "SCR building panel," offers the architect a new form of clay masonry. It is hoped that he will be stimulated to "re-think" the application of this traditional material, esthetically and structurally.

Architects and engineers who wish to know more about this clay masonry development can receive additional information by writing to: Building Panel, Structural Clay Products Research Foundation, Geneva, Illinois.

Formica's Art Service

Formica Corporation's unique decorative art service in which custom artwork is sealed in Formica laminated plastic and thereby made impervious to fading, grime, abrasion, and adverse atmospheric effects gives architects and designers a medium for versatile, lasting beauty.

Decorative treatments include company emblems and trademarks, tabletops, and wall designs ranging from accent panels to full-scale murals. Three Formica decorative art techniques are employed, separately or in combination:

1. "Artlay" reproduces patterns, commercial trademarks or original repetitive designs in Formica by a silk-screen printing process. Step-and-repeat designs, simple mural effects, and almost any other applied design can be produced by this technique.

2. A great variety of color and design combinations are possible with the "inlay" process, in which treated Formica paper or aluminum parts—plain or anodized—are cut to desired shapes and sizes and laid into the laminate before the final pressing operation.

3. One-of-a-kind installations such as original paintings or murals can be laminated.

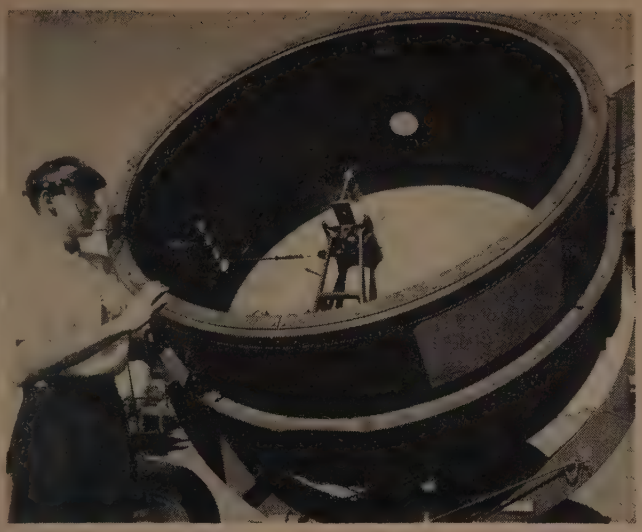
The service may be used in these ways—

—the client may send sketches or ideas to Formica's art department, where a design meeting his specifications will be created and submitted for approval; or

—the client may send his chosen artist's completed design for duplication with special Formica inks; or

—the artist may personally oversee the work at the company's art department in Cincinnati, working directly with the Formica art staff.

BY **Minneapolis-Honeywell Regulator Company**



In a Honeywell solar furnace project, a "retired" military searchlight reduces the sun's rays to ¼", creating a 6000° F. temperature—enough to melt any known metal.

CLIMATE CONTROL and the FUTURE

Man has made more progress in the past half-century controlling the artificial climate inside of buildings than he made in the previous billions of years. Today man is able to control air temperature, humidity and circulation within a minute degree.

But it wasn't always so easy. If he was lucky, prehistoric man had an open fire in his cave and controlled the temperature by snuggling closer to the flame when cold, dashing outside when the cave got too warm.

Later came huts and houses, fireplaces and stoves —but still the makeshift heating system was either too hot or too cold. Less than a century ago America's first production system to control climate indoors was marketed.

Today, says Finn J. Larsen, Honeywell vice president for research, a building can be precisely controlled to give enough heat (or refrigeration) coupled with the correct humidity so people can work or play under optimum physical conditions. Powerful air cleaners electronically "scrub" 98 per cent of all impurities from the air. Charcoal air filters erase all odors from the air, making it truly smell-less. But all the problems aren't solved yet.

Here is what Honeywell scientists are working on that will have immediate application in the future. . . .

Research aimed at developing a method of controlling air temperature and humidity level simultaneously. At present, separate controls are necessary. Researchers are seeking a control device which will either add or reduce moisture at the same time it is being heated or cooled.

Extensive studies on the effect of radiation heat transfer on human comfort involving a phenomenon known as cold-wall magnetism. Cold walls and windows radiate cold to warm objects (for instance, a human body). Present thermostats measure air temperature and are not sensitive to radiation heat transfer. What Honeywell engineers are seeking is a thermostat that is sensitive to both air temperature and radiation in the same manner as the human body.

Development of an experimental temperature control device that sends radio signals to the heating system to call for more or less heat. This thermostat needs no wiring and makes it possible to control temperatures remotely from any area of a building. With further development, someday it may be possible to take your thermostat with you to provide comfort wherever you go.

Looking further into the future, Dr. Larsen foresees mood "climates" piped into rooms, much as today we pipe in mood music. By pressing a button, one could duplicate the atmosphere of a languid summer day at the seashore. The air would become warmer and more humid. Odors fed into the air-conditioning system would duplicate salty ocean breezes. Infrared and ultraviolet lamps might go on at the same time to give the people a slight suntan. Cameras tied into the climate control system might project seashore scenes on special wall screens. Loudspeakers would feed in cries of seagulls and roar of surf.

Lest the working staff become too drowsy, another button might give the bracing atmosphere of a mountaintop. The invigorating air would be cooler and scented

A Honeywell research assistant pours in the liquid air which makes this heat sensor device indicate heat sensitivity to a lighted match as far away as 1½ miles.

with pine. The humidity would drop, while the loudspeaker might rustle with sounds of trees. At the same time a mountain scene would be projected on the wall screens.

Honeywell is also interested in reseach on ionized air. Experiments have indicated that an excess of positive ions in the air makes people feel depressed and subtly unhappy, while a preponderance of negative ions perks people up and makes them feel on top of the world.

In the future, then, indoor climate won't be restricted to control of temperature, humidity and odor. It will be part of a complete system to create a desired psychological envelope for human activity, and tied in with sight and sound to induce dynamic or restful responses.

Such a complete climate control would have wide application in commercial buildings—say, to enhance customers' appetites in restaurants, make people feel prosperous and happy in department stores. . . .

But climate control will not be confined indoors. Larsen says that radiant heating systems will be used at outdoor football games, race tracks, fairs. . . . The spectators will keep warm and dry, no matter what the weather. And there will probably be some means to cool spectators during hot summer days.

The future of mechanically controlled weather is even more challenging now than it was a century ago, when Honeywell started making the first production thermostat in America.

news from Stanley research—

Increased emphasis on marketing research by The Stanley Works, New Britain, Conn., has resulted in numerous new products embodying new concepts and improved design. A good example resulted from a field study—Stanley Hardware Division's new multiple folding-door hardware set for lightweight doors up to 35 lbs. each, one inch to 1¾ inches in thickness. Here the concept certainly is not new, hardware that allows doors to serve as room dividers in the home, office and countless commercial situations. However, the hardware, engineered to include non-binding opening and closing action and bi-fold action for access way, has unique heavy gauge steel hangers with two load bearing nylon rollers and two guide rollers. A special flat spring also provides a self-leveling device which automatically adjusts for variations in load bearing during operation, keeps the nylon roller in the V of the track.

The engineers went two steps further; both horizontal and vertical adjustment are provided and a screw stud spring assembly which acts as an aligner, keeps all doors rigid and in line when closed.

The latest product came as a result of the full mortise paumelle hinge, BB 93, originally designed and installed on 16 floors of the new Time-Life Building in New York City. Further research of this line indicated that architects were seeking a hinge with a smart, clean-lined look that would blend attractively with the ultra-modern in lock trim, pulls and other door hardware. Answering this search is the new companion to the paumelle hinge, the Stanley series "140" of custom hinges for average frequency doors. It is a compact version of the popular BB 93 design especially for use on 1⅜ inch to 1¾ inch average frequency doors. It measures only 4½ by 3½ inches and it is made in heavy .203 gauge. ADAPTA-Color, a plus feature of the hinge, is designed to match, blend or contrast the hinge with modern decor of offices and other locations in modern buildings. All popular plated finishes are stocked as well as black, all white, black and white, or natural wood.

the care of LIMESTONE

By **J. H. Martindale**, C.E.
Indiana Limestone Institute

IT HAS BEEN SAID that good construction and reasonable care used in the maintenance of masonry makes it practically ageless. Indiana Limestone has proved its durability by over one hundred years of use, with little attention being given to maintenance until recently.

Indiana Limestone, like any other material, will get dirty from exposure to the elements over a period of many years. Dirt, soot, chemicals, etc., are washed out of the atmosphere by rain and the accumulation on the exterior of any building causes an unsightly appearance. In metal and glass buildings, the dirt is removed periodically by washing down the building. In limestone buildings, the dirt has been allowed to accumulate and is seldom if ever cleaned.

Cleaning Methods

Cleaning Indiana Limestone can be done effectively, economically and without harmful effects to the stone. Methods of cleaning are as follows:

The wet aggregate method is a mechanical system using a combination of water and a soft, fine aggregate through a special nozzle to remove all dirt and grime from the surface. *Recommended.*

The hydro-air method is a mechanical system that cleans with water shot from a special nozzle at high pressure (800 to 1500 PSI) to remove all dirt and grime without harming the surface. *Recommended.*

Steam cleaning, while it has been used extensively and does not harm the surface, has limited effectiveness on Indiana Limestone. It will not remove the heavy concentrations of dirt or black spots without an acid additive. *Strong acids are injurious to limestone and should never be used.*

Sandblasting, while capable of removing all dirt, also removes some of the surface, destroying the smooth finishes. It leaves the limestone roughened so that it becomes more susceptible to the accumulation of dirt. *Sandblasting is not recommended.*

Small areas may be cleaned with a belt sander when the surface is flat and the finish is smooth. On curved surfaces such as carving and molding and for other finishes, rub the area with "Foamglas" insulation. Flush the area with liberal amounts of clear water to wash away the waste.

Where dust and water are objectionable during the cleaning process, an ammonium fluoride liquid cleaner is available. The cleaner is applied with a stiff fiber brush and sponged or hosed off with clear water. Also, a strong solution of detergent and water applied with a stiff fiber brush will remove most soil of recent origin.

Special Cleaners

Rust stains, while quite permanent because of a reaction between iron and calcium, can normally be bleached with a solution of oxalic acid and water. Oxalic acid is available at any drug store in crystal form. Dissolve the crystals in water by allowing the solution to set overnight.

Copper stains are green and may come from either copper or bronze. A solution of sodium cyanide will readily remove them. This compound is a virulent poison and caution must be used.

Lipstick stain can be dissolved with carbon tetrachloride. Use a stiff fiber brush to apply, then flush with clear water.

Redwood stains can be removed with ordinary household bleach.

Oil and grease can usually be removed by making a paste of Fuller's Earth and benzine. Apply and let dry, then remove and wash with soap and water.

A clean building is an asset to any business. Indiana Limestone is used extensively because of its durability and the ease with which it can be shaped. An occasional cleaning and treatment will keep a limestone building looking new and the stone quarry-bright.

Water Repellent Treatments

Much has been written recently about external coatings with water retarding qualities. The different aspects of these rain-resistant coatings, or water repellents, have been the subject of extensive research resulting in various recommendations. *This article is limited to Indiana Limestone only.*

The major advantages in treating Indiana Limestone with a water repellent are the maintenance of clean surfaces and the preservation of the original beauty of the stone. The physical damage to Indiana Limestone resulting from water freezing in the pores must be regarded

as minor. The mortar joint is of more concern. Shrinkage is characteristic of ordinary cement mortar and thus it becomes capable of absorbing and retaining water. The expansion of this water when frozen causes the mortar to crack. This repeated process eventually disintegrates the mortar. Therefore, a field application of water repellent would be beneficial to the exterior surface of a building to protect the mortar joints from the elements as well as to keep it clean.

Although Indiana Limestone is low in absorption when compared to other stone, it will absorb moisture up to six percent by weight. This moisture darkens the stone and it will remain so until the moisture is removed by evaporation.

Considerable moisture is purposely placed into a masonry wall during construction. It must come out and it usually comes to the outside, due to the heat from the sun. As the moisture is drawn out, it brings with it any salts or staining matter from the back-up material. This staining matter is deposited at the surface and, although it does no damage to the stone, is referred to as temporary and objectionable efflorescence.

Water repellents cannot entirely eliminate this objectionable staining. However, they do reduce the problem since the moisture must transform to a water vapor in order to pass through the treated surface. Therefore, an application of water repellent during mill fabrication will reduce temporary efflorescence as well as protect the stone from other stains caused in shipping, handling and storage.

At present, external treatments are usually one of three types: stearates, silicone resins in a solvent, and sodium methyl siliconate in an aqueous solution. It is thought that the better quality treatments should reduce water penetration below the level likely to cause the appearance of dampness. Thus, coating performance is evaluated as the capacity for reducing moisture penetration.

Rating the ability of external treatments presents a rather complicated problem due to the lack of reliable methods for establishing the correlation between test results and performance in practice. Presently, no satisfactory procedure is known although several methods are used locally with some degree of success. The test methods used are of a comparative nature. Although specimens and procedures vary, evaluation is always based on comparing results of treated and untreated specimens. A marked disadvantage is the effect of fluctuations in the specimen properties.

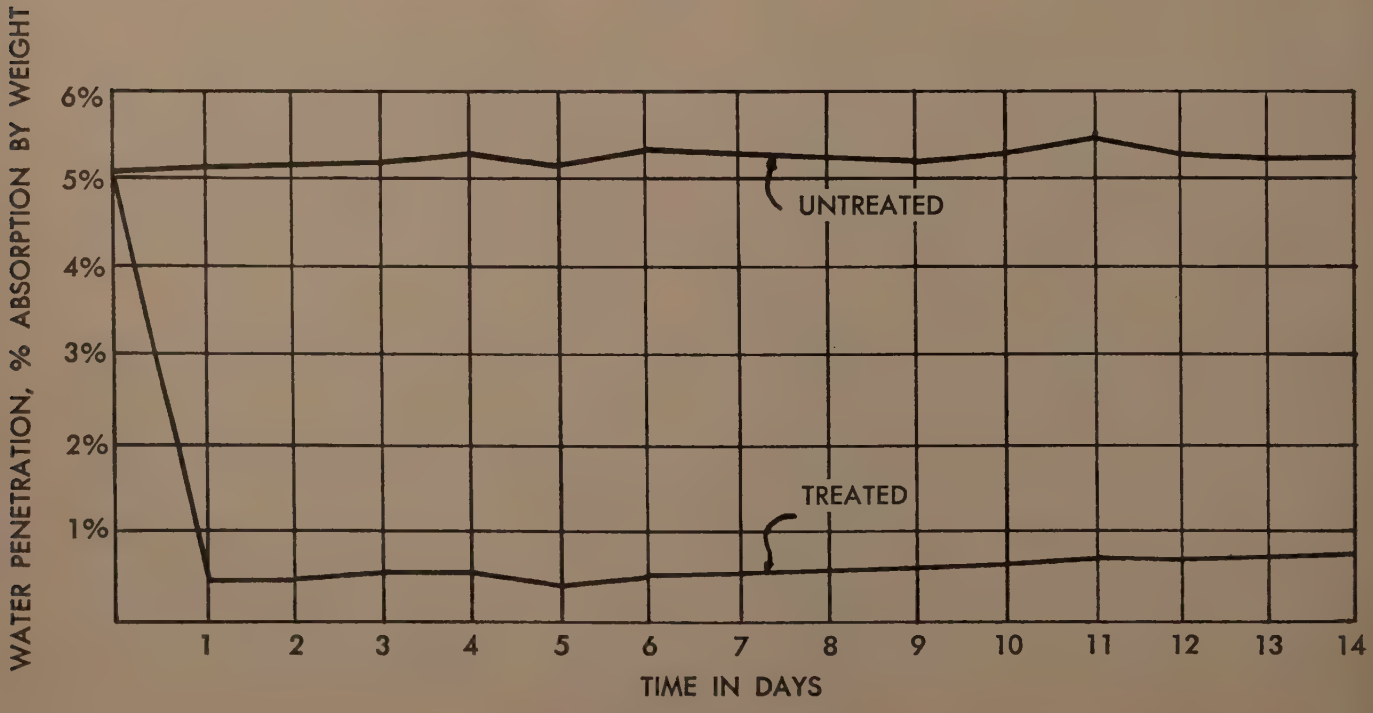
Tests, based on percent of moisture absorbed, indicate the absorption should be one percent or lower to reduce moisture penetration below that required for appearance of dampness. *See Figure I.*

Any one of the three types of water repellents is not the final answer to every masonry surface. The type used must deposit the basic material correctly in the pores of the masonry. It must not stain the masonry surface and it must result in water repellency.

Stearates are usually metallic soaps and are limited in water repellency and durability. They are a coating only and are of little benefit to Indiana Limestone.

Silicone resins, in a solvent solution, cure by reaction between the silicone and the silicate portion of the substrate. In regular masonry or brick, this silicate substrate is available. In limestone, however, only a carbonate lattice is available. The neutral, nonionic character of sol-

Figure I



vent type water repellents can do little to promote any bonding between carbonate and silicone to produce a permanent bond. Also, discoloration can result from some solvent carriers.

Sodium methyl siliconate, in an aqueous solution, cures by reaction with carbon dioxide in the air. By its basic and ionic character, it leaches out a few of the carbonate ions and substitutes silicone ions to give a chemical bond. Because limestone is of a hydrophilic character and the basic material or substrate will not absorb water, the surface of each particle of substrate is readily wetted with an aqueous solution and even distribution and penetration of the silicone is permitted.

Research indicates that an aqueous silicone solution is better for limestone. A mill application will protect the stone temporarily but a good coverage is difficult due to the excess moisture in the stone during fabrication. A field coat will fill in the voids to give complete protection to the stone and the mortar joints. However, the question always arises regarding the effect on the mortar bond to the stone when mill application is used because mill application includes all sides of the stone. Tests show that it does affect the bond, but not to any consequence. After all, the mortar joint is usually not used structurally (load bearing)—only to seal the joint.

Mortar tests were made with silicone as an additive in the water. However, this did not make the mortar water repellent in all cases—only where the water in the mortar had worked to the surface in horizontal joints. In vertical joints, the water did not come to the surface. Consequently, adequate amounts of silicone were not carried to the surface to cause water repellency. Minute amounts indicate an increase in the workability of the mortar, but tests are not complete on strength. Here again, test procedures are lacking. Mortar tests are written on the ingredients, not on physical bond tests. So the modulus of rupture test was used by butting two pieces of stone together in mortar then applying pressure to the specimen at the midpoint until the bond parted. All mortar used was of 1:1:6 mix and tested after twenty-eight days.

Description	*Average results*
Untreated dry stone	434 lbs per sq. in.
Mill application	301 " " " "
Mill application with 1½% silicone added to mortar	262 " " " "
Mill application with 3% silicone added to mortar	238 " " " "

The above figures show that silicone on the stone, or when added to the mortar, does not reduce the bond to the point that the mortar joint, when used for the purpose intended, is appreciably affected.

How much silicone should be used? The amount of silicone absorbed by the stone is the determining factor. Tests show that three percent solids is about the maximum on Indiana Limestone. Temporary discolorations will occur on some formations of limestone when a higher percentage is used. Less than two percent will not provide adequate coverage to obtain the water repellency needed. Here again, the various qualities and formations of the stone limit a universal product. In almost all cases, three percent solids should be adequate.

Treating the stone as outlined is equally effective on reconditioned or old limestone that has been cleaned. The treatment will not function properly on walls containing cracks or other structural defects. It will not bridge cracks. Cracks must be filled, joints repointed and the structural defects corrected before application.

Leaks, if ignored, cause weakening of the walls, staining of the interior and corrosion of metal structural members. Leaks usually reflect the direction of wind driven rain. A check should be made for faulty flashings, open coping joints, poor caulking and deteriorated mortar joints during cleaning.

Why discuss treating limestone when it has proved itself as a better building material? First, because of the effect of other materials on the stone. If proper workmanship is used, the effect is minor. But, in today's fast building and with fewer stone masons, proper care of the stone is often neglected. Secondly, there is a trend toward better maintenance of buildings. Owners want their building to look clean and without that aged or antique appearance.

Treatments are not the answer to all problems. They can help solve the construction problems of discoloration. But if no treatments are used the discoloration problem is solved with a few months of exposure. Treatments can reduce dirt accumulation for periods of five to ten years, depending on locale. Then another treatment should be applied. A water repellent treatment is beneficial to Indiana Limestone. It reduces the drying out period and keeps the building clean.

New Construction

Any masonry wall requires a drying out period after erection. Limestone is subject to a temporary discoloration during this period. This is the temporary efflorescence caused by moisture and staining matter from the back-up material that was previously discussed.

The normal procedure of reducing the discoloration is to coat the back of the stone with an asphalt emulsion to act as a water barrier. The asphalt emulsion is troweled on at the job site before setting. However, a good bond requires clean, dry stone and this is not always practical. Other water barriers are available in the form of acrylic resins, synthetic rubber compounds, flat vinyl lacquer, and cement-base waterproofing. These can be brushed or sprayed on at the job site or during fabrication. Complete test data are not available at this time to show the full effectiveness. Some of them, however, have been used with very satisfactory results.

Shading the Sun...

The need for sun control is one of the most important factors behind the growing trend toward the use of precast concrete curtain walls and facings in the designs of many commercial, public and private buildings rising in America.

Polished strength of a metal-clad building is modern and attractive, but where large glass panels are used, the sun is proving to be a big problem as far as heating and air-conditioning are concerned.

The return to masonry was brought about by the architect's search for facing and curtain wall materials that can also provide sun control. One such material is exposed aggregate such as Mo-Sai, versatile material that can be precast in virtually any size or shape, under precise factory controls. Sun control appreciably affects air conditioning costs. One Florida architect stated recently that he saved 20% on air conditioning costs for a high-rise Florida building by using Mo-Sai sunshades cast integrally with the window frame and spandrel unit.

Its warm textures and colors help give Mo-Sai a design versatility that is making it increasingly popular. This flexibility led architects to the imaginative new curtain walls nicknamed "shadow boxes in the sun" which have been used recently or will be used in the near future in the construction of three of America's largest skyscrapers—the 22-story Denver-Hilton Hotel, Denver, Colorado; the 59-story Pan Am Building, and the 30-story Bankers Trust Building, both in New York City.

Left: The Pan Am Building, soon to be built in New York.
Below: View of Denver-Hilton showing guest room windows.

Mo-Sai units on Denver-Hilton's first two floors give shade.

By **Mo-Sai Institute, Inc.**

a newly-recognized architectural problem

Tall and remarkably slender, the Denver-Hilton was one of the first high-rise buildings in America to utilize this unique facade, in its case a heavily-textured reddish-brown. When the sun strikes its surface, it creates deep shadows that change with each hour of the day. Sun control was one of the basic elements that went into its design by I. M. Pei & Associates. Windows in its rooms are set back 16 inches in Mo-Sai stone frames 8 feet high and 2 feet wide. Thus the hotel is shielded from the direct rays of the sun during most of the day.

Aggregate for the Mo-Sai panels was excavated right from the construction site and manufactured into individual units, each of which was hoisted into position and bolted to the reinforced concrete and steel superstructure.

Tall, rectangular units were used on the first two floors. Recesses in the Mo-Sai provide the seat for glass panels. No additional window framing was required. The panes are simply calked into the cast stone frame. On the next three floors, square, grille-type panels add variety to the building face. From the fifth floor to the top, nearly 4,000 of the narrow window units frame the guest room windows. Aluminum inner frames are bolted and calked to each Mo-Sai unit.

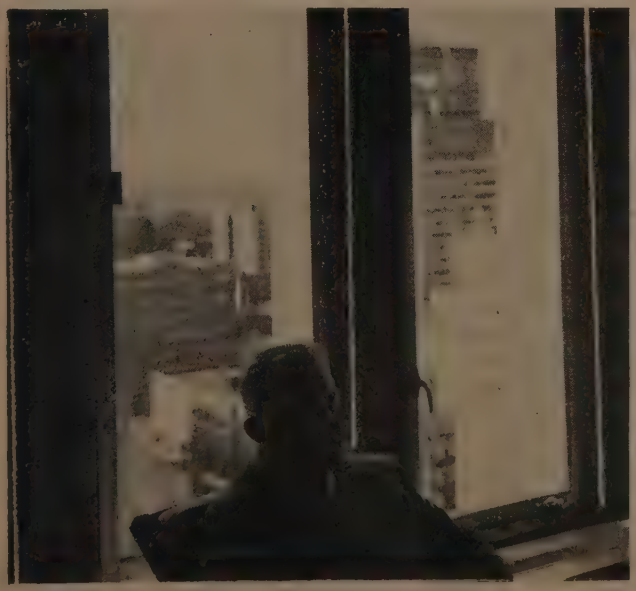
The exposed surface of Mo-Sai also gives the interior of the Denver-Hilton an attractive finish. The depth of grill units blocks the direct rays of the sun in some areas, yet allows enough light to enter to create a pleasant atmosphere. Mo-Sai is used extensively throughout the interior of the hotel in addition to large areas left exposed from the outside curtain walls. Because less interior materials were needed, the use of Mo-Sai resulted in substantial economies.

While the Denver-Hilton represents the largest single use of Mo-Sai to date, the soon-to-be-constructed Pan Am Building will be the largest multi-storied building in the world to use precast Mo-Sai. It and the Bankers Trust Building, also to be built this year, will constitute the first shift in building facades in New York City since the end of World War II, since they will both be covered with Mo-Sai precast concrete curtain walls.

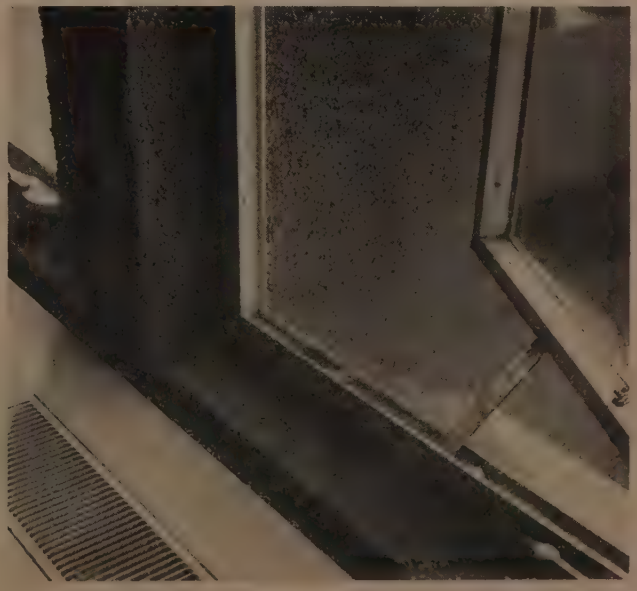
More than twice the size of the Denver-Hilton, the massive, eight-sided Pan Am Building will accommodate 25,000 office workers, making it the largest commercial office building in the world, second in office space only to the Pentagon.

Designers of the Pan Am Building, Emery Roth & Sons, with Walter Gropius and Pietro Belluschi as consultants, chose white quartz exposed aggregate Mo-Sai face for the 11,000 units that will cover the 600,000 square feet of outer surface. Rectangular Mo-Sai will sheath the first eight floors. From the eighth floor up, each unit will frame a window, with vertical fins jutting out 13 inches on each side, with a simple spandrel panel below and window lintel above. Aluminum frame windows on pivots will be attached to each unit. Each unit will be hoisted into place and bolted to steel outriggers, similar to ones used on the Denver-Hilton.

Interior view of Denver-Hilton's guest room windows, which are set back 16" in Mo-Sai stone frames for sun control.



Aluminum inner frames of the Denver-Hilton's guest room windows are bolted and calked to each Mo-Sai unit.



here's what they're DOING in HYDRONICS...

By **Ray Schumack**
The Better Heating-Cooling Council

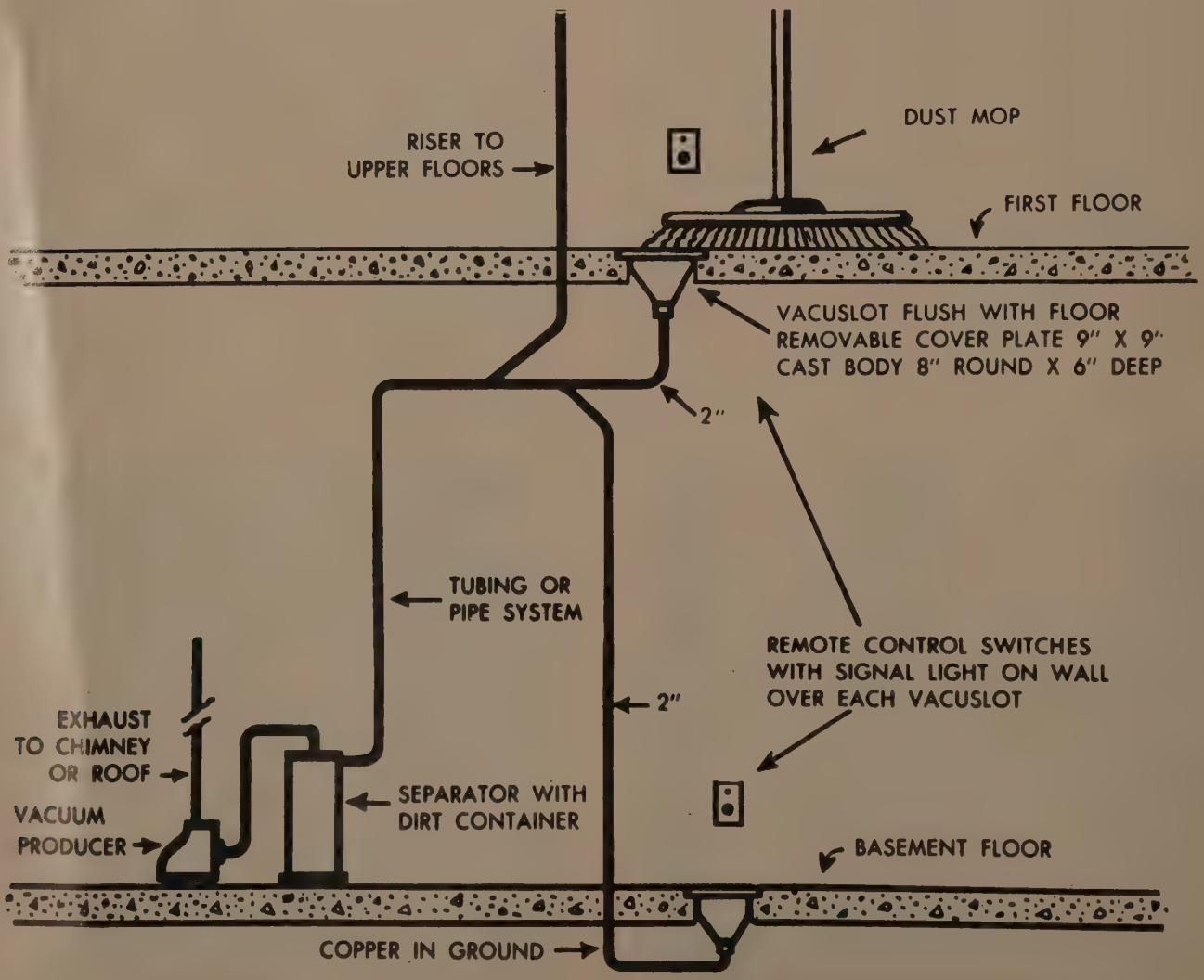
Hydronics, of course, is the new name for the science of heating and cooling with liquids.

The new term applies basically to modern forced circulation hot water heating, but the inherent flexibility of this new method of heating had led to many unusual auxiliary applications.

You will recognize some of the auxiliary applications listed below since several of these techniques have been used successfully and have grown popular during the past few years. Here, according to the Better Heating-Cooling Council, is what they're doing with hydronics:

Snow Melting—A system of tubing or piping is embedded in the concrete or black top of driveway and walks. A liquid (mixed with an anti-freeze solution) is circulated through the system by a small circulator, or pump. The liquid is heated as it passes through a small heat exchanger, which is connected by piping to the same boiler that heats the house.

Zoning—Efficient, low-cost zoning can be accomplished in two ways with hydronics. Separate circulators



Schematic Drawing of Spencer Turbine Company's Vacuslot system illustrates simplicity of installation.

for each zone can be used at the boiler, or electrically-controlled zone valves can be used in the branch piping leading to different areas or rooms of the house. Separate thermostats regulate each circulator or zone valve to provide precise temperature control in each zone.

Hot Faucet Water—Low cost, year-round instantaneous hot faucet water can be supplied with an indirect copper coil water heater that is either connected to or "built" into the home heating boiler. The indirect heater saves the space taken up by a separate storage type heater.

Heated Swimming Pool—The same boiler that heats the house, melts snow and heats faucet water can also heat swimming pool water. A heat exchanger is usually used to heat pool water. At the same time, the decks around the pool can be heated with tubing, using a method similar to snow melting or radiant floor panel heating.

Heated Bathtub—To provide the extra heat that so many people require when bathing, a loop of tubing is installed under the bathtub and connected to the heating system main. Not only will the loop of tubing help to warm the bathroom, but it will prevent "cold feet" when showering.

Heated Towel Rack—The bathroom towel rack, which is usually nothing more than a short length of chrome-plated tubing, can also be connected to the heating system. The towel rack will serve warm, dry towels during the normal heating season.

Heated Drain Board—In the kitchen, another loop of tubing installed under the drainboard and connected to the hydronic heating system will act as an automatic dish dryer for the housewife.

Heated 'Outdoor' Room—A combination green house-solarium can be added to the house at any time and heated with the same boiler that heats the rest of the house. A separate zoned circuit can be installed in the green house, and this will conserve fuel when the green house is not in use. Any type of hydronic heat distributor—baseboard, convector or radiant panels of tubing—can be used if the green house is "zoned."

Spencer's Built-in VACUSLOT

Architects often recognize, even better than their building owner clients, the importance of *designing* in maintenance economies. No doubt this foresight explains the increasing popularity of Vacuslot®, the built-in vacuum system that handles a myriad of maintenance tasks.

Years ago, when commercial buildings were designed with extensive carpeted areas, a built-in vacuum cleaning system was a "must." But with the increase of bare floor areas came a switch to cleaning with large dry mops. Then the problem arose: how to clean the mops?

Spencer Turbine Co., which had been for many years the leading manufacturer of built-in vacuum cleaning system, came up with an answer. Instead of wall inlets to which vacuum hose could be attached, flush mounted plates for floor installation were developed. Piping system, remotely located vacuum producer and dirt separator remained essentially the same.

With a Vacuslot system installed, custodians simply mop dirt and litter to the floor slots, where high velocity vacuum whisks it away. Mops are quickly and thoroughly vacuum cleaned by passing them back and forth across the slot.

No sacrifice in versatility of the vacuum system resulted from the adaptation. Standard attachments for cleaning carpeted areas, wall, overheads, Venetian blinds, etc., can still be utilized. Incorporation of a lightweight portable separator permits use of the system for pick-up of scrubbing water. And an outlet in the boiler room simplifies boiler tube cleaning—with attendent important cost savings.

Important as it is, speedier cleaning is not the sole advantage of Vacuslot. Equally significant in many buildings, particularly hospitals, is the improved sanitation which the system makes possible. Because there is no shaking or manual cleaning of mops, and because carry-off of dirt is through a piped system, there can be no re-circulation of dust or germs into the air. Additionally, in hospitals a special type dirt separator is often used which makes possible the introduction of water or disinfectant and permits flushing all dirt directly into the sewer.

Unquestionably, however, the most frequently cited advantage of a Vacuslot system is the cleaning economy it makes possible. One large Big Ten university where over 20 systems are installed, for example, reports that Vacuslot permits each custodian to handle nearly double the square foot area previously cleaned by hand methods. The resultant savings in personnel and time are obvious.

Crown Zellerbach's new building makes a striking addition

Exterior wall showing installation detail of PPG SOLEX and SPANDRELITE Glass.

clad in PPG GLASS to San Francisco's skyline

The Crown Zellerbach Building is one of the first major projects using an all-glass facing to be constructed in San Francisco. The building is 20 stories high and opens up a crowded area on Market Street.

This light and airy building brings a new look to San Francisco's lower Market Street. The 20-story tower is sheathed completely in glass.

PPG SOLEX® heat-absorbing plate glass in the window areas allows plenty of light to get through but absorbs about 50% of direct solar radiation. The pleasing greenish tint is easy on the eyes. Glare is greatly reduced and air conditioning costs are lower because less solar heat enters the building.

In between the windows, PPG SPANDRELITE® Glass in soft color adds beauty to the exterior. This is a heat-strengthened glass, with ceramic color fused to the back. It is strong and durable . . . resists impact . . . its color lasts.

Entrances feature eight HERCULITE® doors with PITTCOMATIC® handle-operated door openers. The doors complete the open spacious feeling of the building. They are well-known for their sturdiness, strength and endurance. Your PPG architectural representative will give you specific data on any of these products. Or check the Pittsburgh Glass-Clad Curtain Wall Systems Catalog in Sweet's.

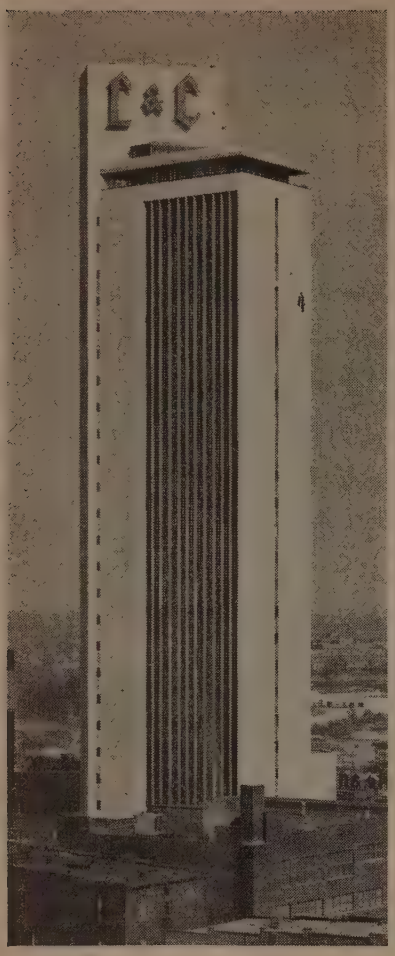
Pittsburgh Plate Glass Company

Paints · Glass · Chemicals · Fiber Glass
In Canada: Canadian Pittsburgh Industries Limited

PPG Rough Plate Glass partitions with a knurled finish provide light, airy privacy.

The board room is a bright and cheerful place to work because of the wide expanse of window area. SOLEX heat-absorbing glass used here absorbs about 50% of direct solar radiation and reduces glare.

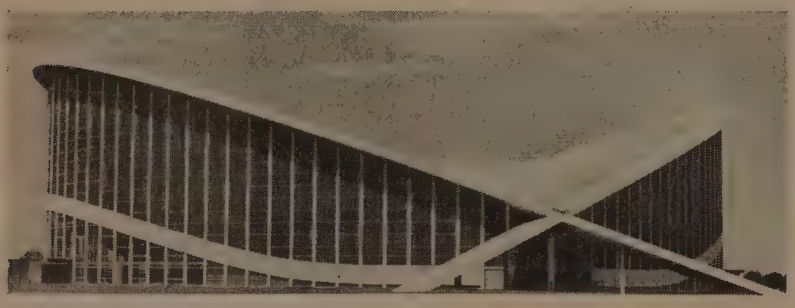
Associated Architects: Hertzka & Knowles and Skidmore, Owings & Merrill, San Francisco, California
Contractor: Haas & Haynie Corporation, San Francisco, California
Glazed by: W. P. Fuller & Co., San Francisco, California



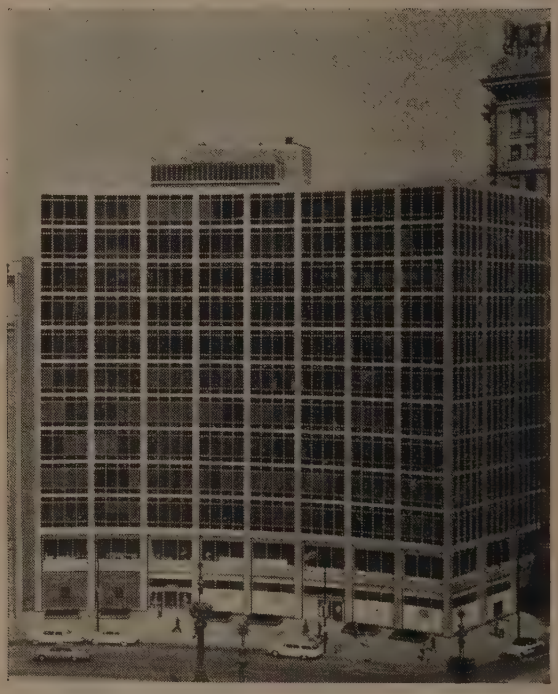
Where does DAP® fit into your picture?

Got a sealing problem on the job you're planning now? Maybe it's a project like one of the DAP applications you see here. If it is, DAP quality caulking, sealing and glazing products can do your job with the same satisfactory, long-lasting performance. A DAP representative will be glad to tell you all about DAP — its dependable quality, ease of application and longer life — and how the right DAP product can help solve your sealing problems. Write if you would like technical bulletins on the DAP products mentioned here.

Life and Casualty Tower, Nashville
Architect: Edwin A. Keeble and Assoc.
General Contractor: J. A. Jones
Glazing Contractor: Pittsburgh Plate Glass Co.
Glazed with: DAP 1231 Mastic Glazing Compound*



North Carolina State Fair Arena, Raleigh, N. C.
Architect: William Henley Deitrick, Inc. • General Contractor: Wm. Muirhead Construction Co. • Glazing Contractor: Pittsburgh Plate Glass Co. • Glazed with: DAP 1012 Glazing Compound*



Fidelity Building, Indianapolis
Architect: Skidmore, Owings and Merrill • General Contractor: George A. Fuller Company • Glazing Contractor: Stewart-Carey Glass Co. • Glazed with: DAP Flexiseal

Pittsburgh Hilton Hotel
Architect: William B. Tabler and Assoc. • General Contractor: Turner Construction Co. • Glazing Contractor: Pittsburgh Plate Glass Co. • Glazed with: DAP 1231 Mastic Glazing Compound*

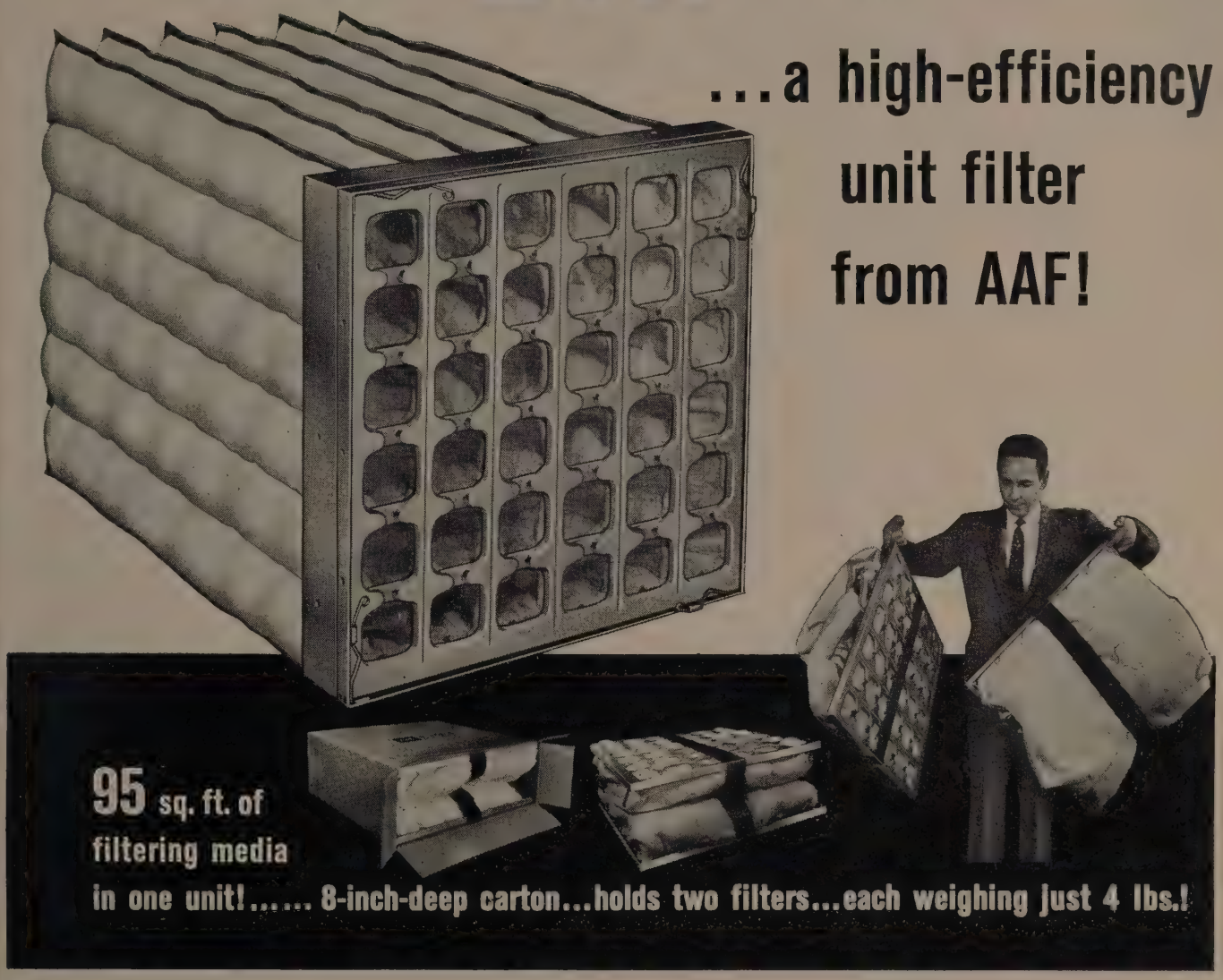
*Trademark applied for

DAP®

DAP inc., *General Offices:* Dayton 31, Ohio

NEW! DRI-Pak SERIES 2000

...a high-efficiency unit filter from AAF!



New dry-type unit offers unmatched combination of air filter advantages. AAF's new DRI-Pak Series 2000 air filter combines high efficiency, low resistance, compactness and large dust-holding capacity to a degree unequalled by any other dry-type unit filter.

The secret is in its unique "windsock" operation. The "tubes" of the glass fiber media inflate to a 36-inch depth when the system is in operation, but collapse when the system is shut down! This collapsing feature eliminates the need for rigid back-up wire grid and the possibility of damage to the cartridge during servicing.

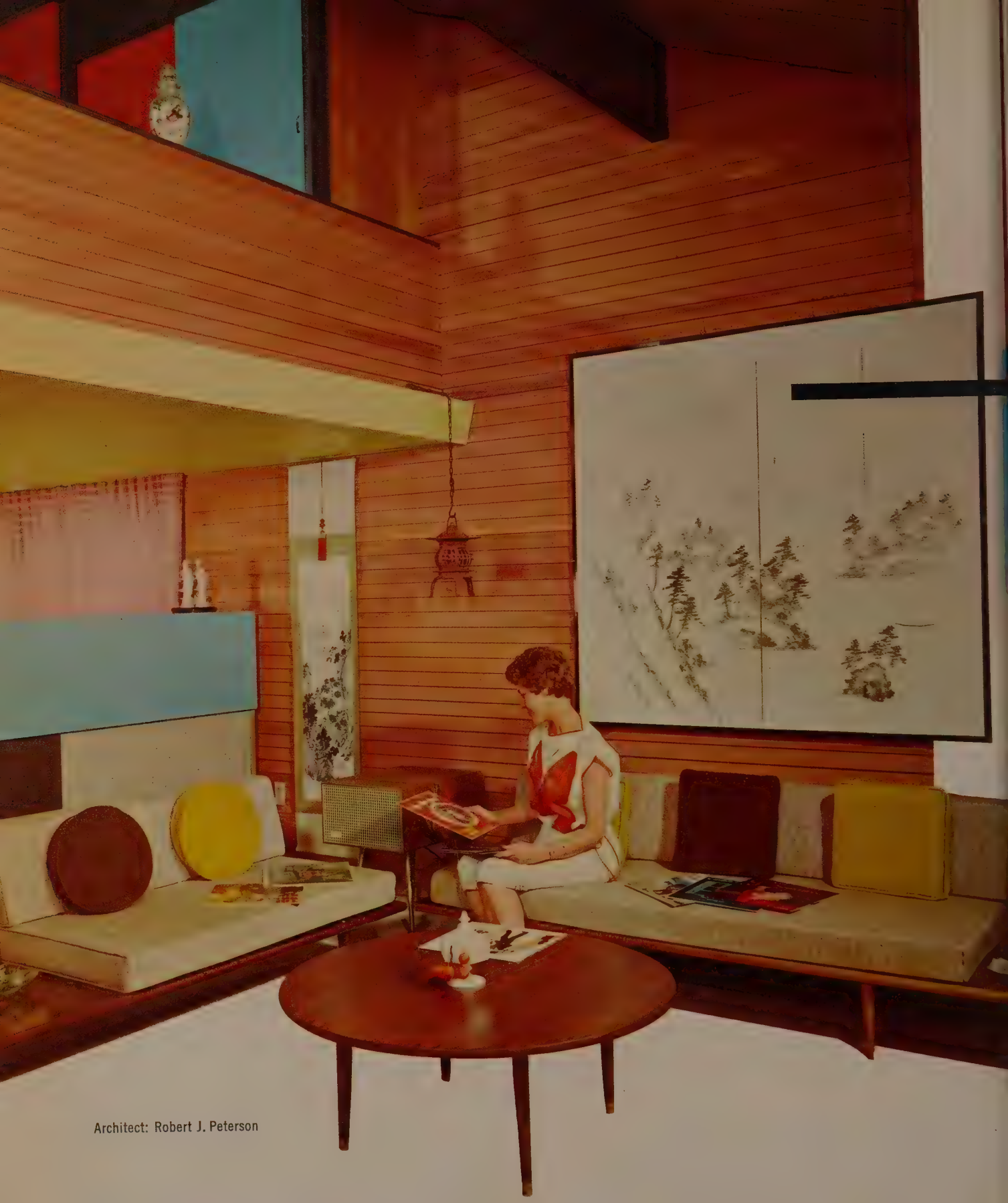
Filter maintenance amounts to nothing more than infrequent replacement of the DRI-Pak cartridge. And the plenum for a bank of DRI-Pak filters need be very little deeper than the filter's 36-inch inflated depth because almost the total space can be used as access to washer, coils, etc., when the system is shut down.

The AAF DRI-Pak is available in 24" x 24" or 12" x 24" sizes.

For complete product information on the new DRI-Pak air filter, call your local AAF representative or write us direct for Bulletin No. 228. Address: Mr. Robert Moore, American Air Filter Company, Inc., 206 Central Avenue, Louisville, Kentucky.

AAF American Air Filter

BETTER AIR IS OUR BUSINESS



Architect: Robert J. Peterson

For technical West Coast Lumber information, write:

WEST COAST LUMBERMEN'S ASSOCIATION

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MODERN DESIGN

USES WEST COAST LUMBER

WEST COAST DOUGLAS FIR • WEST COAST HEMLOCK •
WESTERN RED CEDAR • SITKA SPRUCE • WHITE FIR

Modern design takes on new warmth when you bring the outdoor beauty of Western red cedar bevel siding indoors. Here is a striking use of another versatile West Coast lumber product.

The pattern created by ½″ x 4″ siding gives spaciousness to a small room, and provides an easy-upkeep background for colorful furnishings.

A hillside view site provided the problem, and a combination of West Coast lumber species brought the solution. West Coast Douglas fir framing lumber formed the sturdy floor, walls and roof of the basic home. Fir beams extend from the foundation to support the deck. The unusual outside wall pattern was achieved with the same ½″ x 4″ Western red cedar bevel siding used inside, but applied at an angle of 45 degrees.

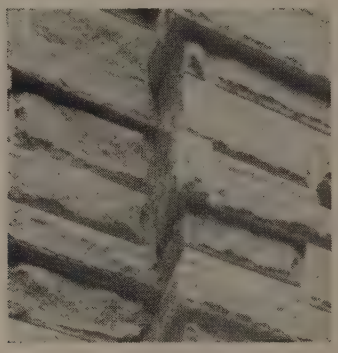
This cedar is also striking in more formal, traditional styling. Manufactured in 4″, 5″, 6″, 8″, 10″ and 12″ widths, its shadow pattern adds character to any size building . . . from a small budget home to a stately multiple dwelling unit such as the one below.

West Coast lumber versatility is the incentive for imaginative design . . . highly practical from drawing board to completed structure. And you have a local source of supply . . . your nearby lumber dealer.

t:
S. Gathercoal, A. I. A.

new ideas in INDIANA LIMESTONE

STACCATO PATTERN



new patterns

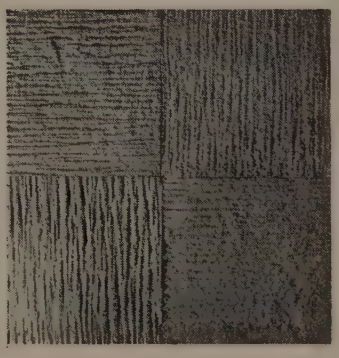
Fresh, creative architectural interpretations can be economically achieved with Indiana Limestone. Striking new patterns add a new dimension to America's prestige building material.

SHOT SAWED SCREEN

new textures

Low-cost, easily-maintained machine fabricated textures provide almost unlimited flexibility for both functional and decorative purposes. Choice of three color-tones: Buff, Gray, and Variegated.

STRIATED



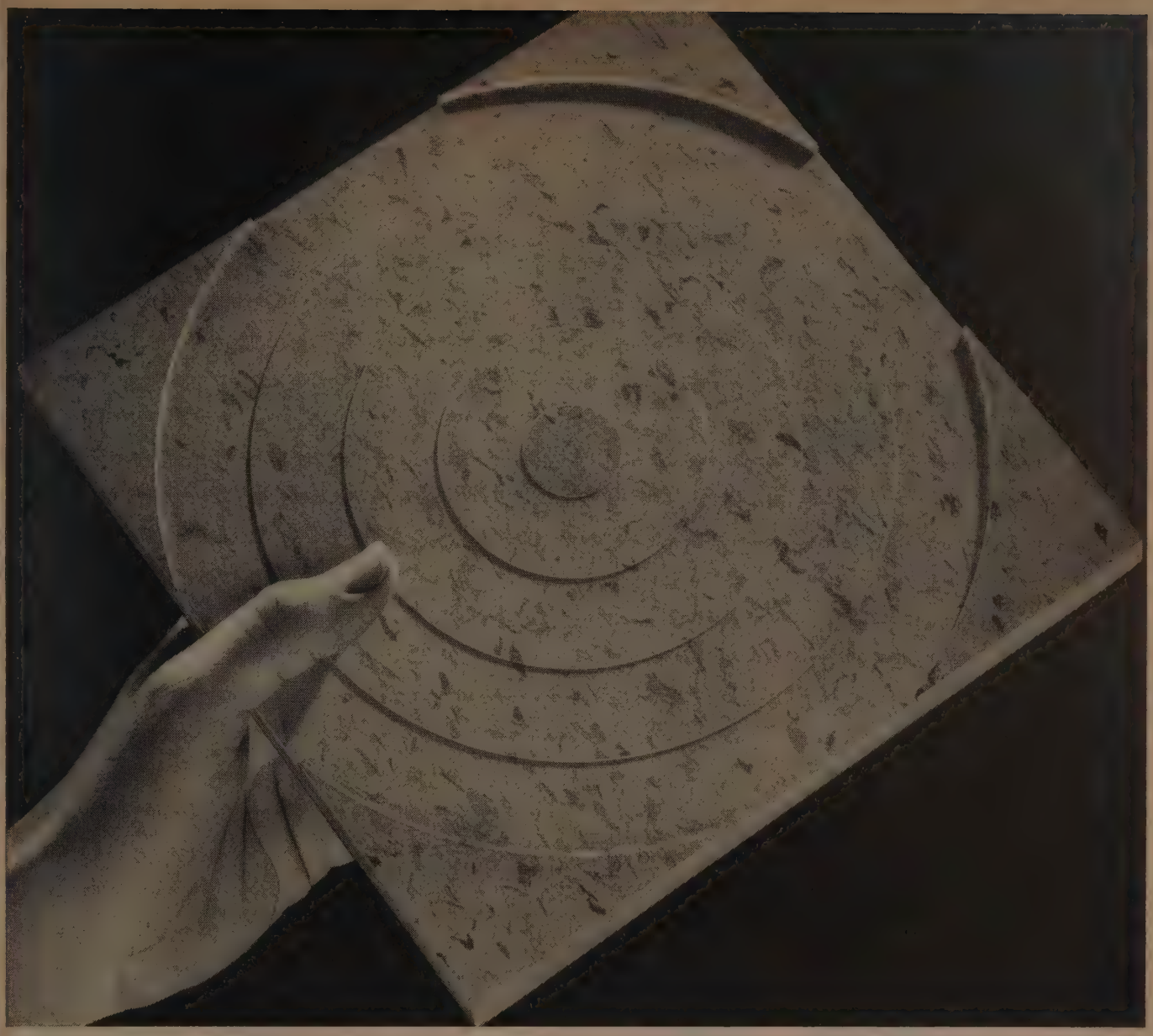
new finishes

Appealing, new finishes are available in genuine Indiana Limestone. These afford the architect a variety of exciting effects—from muted, delicate design to the bold, expansive technique.

The Indiana Limestone Institute recommends that a water repellent be applied to all installations. Write the Indiana Limestone Institute for complete information on the many applications and recommendations for Indiana Limestone.

INDIANA LIMESTONE INSTITUTE

BEDFORD, INDIANA



This is an unretouched photograph of a milled-down sample of Imperial Armstrong Excelon Tile. A demonstration like this proves without question that the textured chip design goes all the way through each tile and insures long-lasting beauty.

THE DESIGN GOES ALL THE WAY THROUGH!

ARMSTRONG IMPERIAL EXCELON TILE

An exclusive Armstrong process makes the Imperial Excelon (vinyl-asbestos) Tile an excellent floor for heavy traffic areas, as well as interiors where lasting appearance is of prime importance. The color chips, which comprise the design texture, go all the way through the thickness of the tile. As the depth test* above shows, the design can't wear away. Vinyl-asbestos tiles which will not pass this test lose their uniform appearance as soon as their surface is slightly worn. With its subtle patterns and superior uniformity of shades, Imperial Excelon forms the perfect background for all decorative schemes. And it can be installed above, on, or below grade.

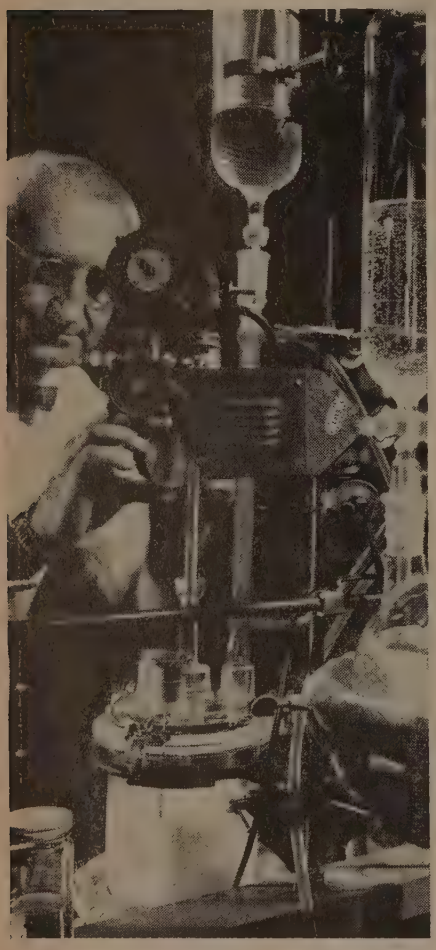
* Suggested specifications and procedure for this test are available on request.

TECHNICAL DATA ON IMPERIAL EXCELON TILE For samples and complete specs see your Armstrong Architectural-Builder Consultant. **Composition:** vinyl resins and asbestos fibers; **durability:** superior; **static load limit:** 25 psi; **underfoot comfort and quiet:** fair; **grease resistance:** excellent; **alkali resistance:** excellent; **ease of maintenance:** excellent; **gauges:** 1/8" and 3/32"; **size:** 9" x 9"; **recommended uses:** above, on, or below grade; **approximate price per sq. ft. installed:** 35-45¢.

Armstrong FLOORS

3 SERVICES FOR SOLVING UNUSUAL FLOORING PROBLEMS

available from Armstrong Architectural-Builder Consultants



1. Technical problems, like how radioactive materials affect resilient floors, or what experimental concrete mixes do to adhesive bonds, will be referred to the technologists at the Armstrong Research and Development Center. They will make studies of unusual and difficult flooring installations and provide suitable solutions and recommendations.

2. Design problems are in the bailiwick of the designers at the Armstrong Bureau of Interior Decoration. They've worked with hundreds of architects in creating floor designs and color schemes. And they can suggest floor stylings to combat special problems, such as marks from stiletto heels or the alteration of a floor design when movable partitions are rearranged.

3. Installation problems, such as choosing underlayments or deciding which floors are best for elevators, dustproof rooms and other special areas, will be worked on by the Armstrong installation specialists. And if you have flooring difficulties on the job, these experts will run tests at the building site, analyze their results, and make appropriate recommendations.

For any of these services, call the Armstrong Architectural-Builder Consultant at the nearest Armstrong District Office. Or write Armstrong, 1603 West End Ave., Lancaster, Pa.

Armstrong
CORK COMPANY
FLOOR DIVISION • LANCASTER, PENNSYLVANIA

WHAT'S NEW! in building materials and equipment

Quality products are dependable products

ACOUSTICAL MATERIALS

ARMSTRONG CORK COMPANY

A new type of suspended acoustical ceiling, the Armstrong Acoustical Fire Guard lay-in system, costs no more to install than ordinary plaster and metal lath but provides rated fire protection for structural steel in addition to sound absorption and dry installation.

The Acoustical Fire Guard lay-in system has earned an Underwriters' Laboratories' three-hour beam protection rating.

Instead of tile, the new ceiling uses special fire-resistant ceiling panels, approximately $2 \times 4'$, which can withstand exposure to direct flame and 2000 degrees heat. They rest in a unique type of exposed grid suspension specially designed to prevent the supporting metal grids from buckling or twisting during exposure to heat. Thus, all runners in the system are allowed to hold their shape and to continue to support the panels during a fire. The system not only protects the structural components of a building from collapse in fire but also combines with the floor structure above to resist dangerous transmission of heat to upper stories of the building.

The ceiling panels can be lifted out of the exposed grid suspension system at any time for access to concealed utilities.

Like Armstrong's Acoustical Fire Guard tile, which has been available since 1959, the new lay-in ceiling requires no additional fireproofing above it. There are no wet installation operations to delay progress on new construction. According to Armstrong, the exposed grid suspension system makes it the fastest means of installing fire protection and a finished ceiling ever put on the market. This factor and a low material cost make the over-all cost of the ceiling less than other types of fire protective ceilings, and in many cases, even less than the cost of a plain plaster ceiling with no acoustical treatment.

The material in the Fire Guard ceiling panel has a Noise Reduction Coefficient of .75, resists sound transmission as well or better than standard high density panels, and can be used with ceiling height partitions to maintain acoustical privacy.

Initially, Fire Guard lay-in panels will be available in the Classic perforated patterns only. Fissured panels are expected to be available early in 1961.

Armstrong Cork Company
Lancaster, Pennsylvania

See advertisement, pages 86-87

THE CELOTEX CORPORATION

The new UL fire-rated Serene pattern in Celotex's Protectone mineral fiber acoustical tile provides two-hour fire protection in combination with a 2″ concrete slab, bar joists, and a Z-Runner suspension system. The tile meets requirements of Federal Specification SS-A-118b, Class A (Incombustible) as tested and reported by the Acoustical Materials Association.

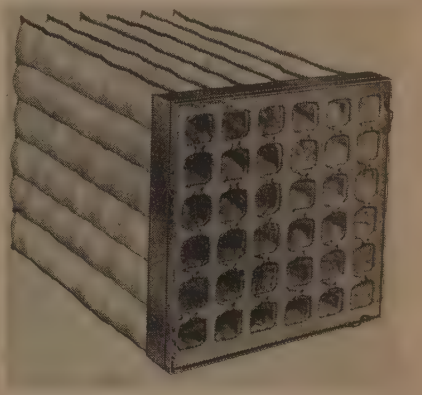
The $5/8'' \times 12'' \times 12''$ Serene pattern with self-aligning joint has a free flowing design of miniature perforations, with a factory-applied washable white finish which can be repainted repeatedly without loss of sound-absorbing efficiency. It has a Noise Reduction Coefficient of .75.

The fire-retardent Protectone system speeds construction since the acoustical tile and installation system are "dry" materials. Protectone is sold and installed by franchised Acousti-Celotex distributor-contractors.

The Celotex Corporation
120 S. LaSalle Street
Chicago 3, Illinois

AIR FILTER

AMERICAN AIR FILTER CO., INC.



American Air Filter's new dry-type air filter, the AAF DRI-Pak Series 2000, relieves many of the maintenance problems normally associated with the unit type of design. The filter inflates when the ventilation system is in operation and collapses when the system is shut down. Therefore the unit can be inspected and serviced from either the air-entering or the air-leaving side of the filter bank. Chances of damaging the filter during installation have been greatly reduced because no back-up wire grid is necessary.

The DRI-Pak is available in three standard sizes—Series 2000 (24″ × 24″ × 36″ inflated); Series 2000H (12″ × 24″ × 36″ inflated); and Series 1000 (24″ × 24″ × 18″ inflated). For each size, three different medias are available, Nos. 100, 90, and 60. These glass fiber medias offer average efficiencies of 95%, 85%, and 55% respectively, all based

What's New!

on the National Bureau of Standards Dust Spot or AFI Method using Atmospheric Dust.

Basically, the 24″ × 24″ × 36″ DRI-Pak filter consists of a metal header and six large fiber filter pockets 24″ high and 36″ deep. Each of these six filter pockets is divided into six tubes, which are sealed to the header with a cement which is highly chemically resistant and waterproof. All corners and edges of the header are rounded to prevent snagging the glass media, which is completely sealed around the periphery by a sturdy and flexible binding. On the air-leaving side of the media is a fine mesh which adds support to it. After the unit has reached final resistance, the cartridge (including the metal header) is thrown away. Cartridge life is extended by the use of a prefilter.

Each 24″ × 24″ × 36″ DRI-Pak filter is rated at 2,000 cfm and provides 95 sq. ft. of filtering media surface. Velocity through the media is only 21 fpm, and the ratio of media area to face area is 24:1. Units may be operated at capacities as low as 50% of normal rating with corresponding decrease in initial resistance. Cleaning efficiency is not appreciably affected.

The new filter is extremely lightweight and requires little storage space, as each 24″ × 24″ cartridge in the folded state is 4″ deep and weighs 4 pounds.

AAF product bulletin 228, which describes the construction of the DRI-Pak filter, is available upon request to the company.

American Air Filter Company, Inc.
206 Central Avenue
Louisville, Kentucky

See advertisement, page 37

ALUMINUM

ALUMINUM COMPANY OF AMERICA

Aluminum Company of America has announced its development of a complete aluminum soffit and fascia system designed to banish the problem of moisture collection under roof overhangs. It will be put into distribution by Alcoa Building Products, Inc., recently formed as a wholly-owned Alcoa subsidiary to market Alcoa's line of residential construction products.

The new system includes five variations of soffit sheet, four fascia designs, and a complete line of accessory items, including a soffit miter, soffit trim, soffit wall holder, and soffit fascia trim.

The soffit pieces are available perforated or nonperforated, in widths of 24″ and 36″, and are prepainted in white Alumalure, Alcoa's special baked enamel finish. The soffit features a stucco pattern for a soft, glare-resistant surface, and is ribbed for maximum strength between rafters. Perforations are 1/8″ in diameter, and are on 21/64″ staggered centers. The perforated soffit sheet contains 14 per cent open area.

Both the soffit and fascia are designed to be used with any style of roofing design, and may be interlocked with Alcoa siding, gutter, and downspouts.

Alcoa Building Products, Inc.
778 Alcoa Building
Pittsburgh 19, Pennsylvania

CERAMIC TILE PRODUCTS

STYLON CORPORATION

Stylon V-Cap is a one-piece ceramic moulding for counters and drainboards that has a raised rim to keep liquid from running off the counter onto the floor or the housewife. Shaped like a "V", it is 6″ long, 2½″ deep, and is installed in conventional cement mortar or mastic adhesives. Precautions should be taken to keep the underlayment (usually exterior-type plywood) dry.

V-Cap is ceramic tile and can be damaged only by letting an unusually heavy object land on it hard. Its installed cost is comparable to plastic laminate on counters or vanities; if damaged, it has a replacement advantage over laminate because only one piece of the V-cap edging need be replaced as against several feet of laminate. In contrast to the "kid-gloves" treatment required when using hot pans around plastic laminate, any kind of hot skillet can be moved off the fire onto the V-cap edging—it won't burn, fade, rot, rust, fray, or discolor. It can be wiped clean with a damp cloth and needs no waxing.

V-Cap is made by Stylon's Redondo (West Coast) Division and comes in Redondo's conventional colors of Wear-Ever glaze, a Crystalline ceramic finish that is unusually tough and will withstand abrasives and cooking acids as well as sizzling hot pans. Used in California for three years, it is now being introduced across the country through Stylon's wholesale distributors and tile contractors — during the introductory phases, three neutral colors will be marketed east of the Rockies.

Stylon Corporation
Box 341
Milford, Massachusetts

DOORS

FORMICA CORPORATION

For commercial and institutional interiors, Formica Doors offer the advantages of long life, ease of maintenance, and long-term economy.

Both faces and the stile edge are surfaced with Formica laminated plastic, available for doors in the company's complete decorative line of colors, woodgrains and patterns. The laminate is impervious to strong cleaning solvents and disinfectants.

Formica Doors are factory pre-mortised for trouble-free operation and delivered to the job site ready to hang. Eight standard flush types are available, with pre-finished wood glazing beads for glass openings. Formica Doors are available in all standard sizes up to 4′ × 12′ and carry a five-year guarantee against defects in material or workmanship.

Formica Corporation
4614 Spring Grove Avenue
Cincinnati 32, Ohio

SIMPSON LOGGING COMPANY

New Symphonic doors designed to provide a continuity of decorative effect throughout the home or office will be supplied by Simpson Logging Company in two individually styled "families"—the Sonata and the Concerto. Designed by Walter Dorwin Teague Associates, industrial designers, the lines are called "families" because either of the two styles may be used for all doorways. The coordinated use of "family" door design unifies interiors and helps to establish decorative motif.

The Sonata Symphonic doors have curved rails to add depth and eye interest and to contrast with flat wall paneling and glass. Sonata doors are available with plain or planked panels.

In the Concerto door family, materials may be interchanged within the vertical panel space in the upper side portion of the doors. Colored plastics, different woods, or plain, frosted, or rippled glass may be inserted in this panel space. The panels can be painted in different colors from the stiles and rails to give individuality to each room, yet the doors establish unity of design throughout a home or office.

Simpson Logging Company
2039 Washington Building
Seattle 1, Washington

DOORS—SLIDING GLASS

ROLSCREEN COMPANY

In the Pella Wood Sliding Glass Door, Rolscreen Company's sliding glass door with a wood frame, each door panel is reinforced with a steel "T" section which prevents warpage and assures lifelong ease of operation. This construction permits a trim, narrow frame which provides both the beauty and the excellent insulating properties of wood and the strength of steel. Stainless steel and wool pile weatherstripping makes the door weathertight and eliminates condensation problems. Other features include stainless steel track, self-closing screens, and solid bronze hardware. Glazing options available are 1/4" plate, 5/8" or 1" insulating glass.

Rolscreen Company
Pella, Iowa

What's New!

FASTENERS

RAMSET FASTENING SYSTEM

Two new fastening products have been announced by Ramset Fastening System. They are the R-550 craftsmen's kit for hammer-in fastening work and the Shure-Set R-450 heavy duty fastening tool.

The R-550 craftsmen's kit includes one standard Shure-Set hammer-in tool, one Shure-Drive shock absorbing hammer, 50 drive pins and 50 threaded fasteners, all in a deluxe carrying case. Retail price is $29.95, which is $7.50 less than the total cost of the individual items. The kit can be used to complete more than 100 different fastening jobs, setting studs into concrete or thin steel with a few hammer blows.

The Shure-Set R-450 heavy duty tool was developed to meet the special needs of contractors to fasten close to walls and other hard-to-reach spots. It has an offset handle designed to keep the worker's hand away from the striking surface.

Ramset has also announced that the Shure-Set hammer-in fastening tool R-375, formerly sold with a drill holder as standard equipment, can now be purchased without the holder, if desired, at a retail price of $10.50. Using it and a hammer, a craftsman can place threaded studs or drive pins into concrete or thin steel without drilling or plugging. For specialized jobs such as drilling into tile or glazed brick, the R-363 drill holder, which can be purchased separately, screws onto the mouth of the tool in a matter of seconds.

Ramset Fastening System
Winchester-Western Division,
Olin Mathieson Chemical Corporation
289 Winchester Avenue
New Haven 4, Connecticut

See advertisement, back cover

FLOORING—VINYL

AZROCK FLOOR PRODUCTS DIVISION

Premiere, Azrock's new pattern in vinyl asbestos tile, achieves a fleecy cloud effect distributed uniformly over the surface and at every level through the tile's full thickness.

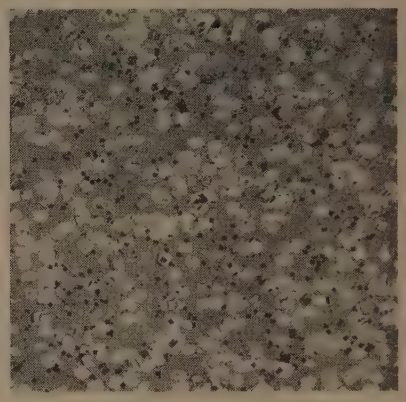
The pattern is available in seven colors with tinted-white backgrounds, including two metallics. Colors are V-421 Antique Lace, white with gray; V-422 Sunset Cloud, white with pink; V-423 Autumn Haze, white with beige; V-424 Chantilly, white with soft green; V-425 Pompeii, white with turquoise; VM-461 Alabaster Gold, alabaster white with gold metallic; and VM-462 Travertine Gold, cream with gold metallic.

Premiere is available in 9″ × 9″ size, 1/16″ thickness, at regular vinyl asbestos tile prices, with the two metallic tones slightly higher.

Azrock Floor Products Division,
Uvalde Rock Asphalt Company
Box 531
San Antonio, Texas

See advertisement, second cover

CONGOLEUM-NAIRN INC.



Westernaire, the latest member of Congoleum-Nairn's Flor-Ever inlaid vinyl group, is patterned with clusters of cube-like figures arranged to give a three-dimensional appearance. Popular-priced Westernaire is available in six colorations—beige with turquoise and green; white with beige and greige; woodtone with beige and greige; sandalwood with beige, greige and pink; white with beige, greige and yellow; and pale bronze with beige, greige and green.

Two new patterns are available in Congoleum-Nairn's luxury inlaid vinyl sheet goods—Showcase Vinyl, which features a "fleurpoint" decoration utilizing geometric figures fused deep in a crushed marble design vinyl sheet. Metallic accents and metallic fleurpoints have been added in white with gold fleurpoints and accents and beige with copper fluerpoints and accents.

Flor-Ever Cosmopolitan inlaid vinyl, a crushed marble design vinyl yard goods, has been given three new colorations—bronzed green and white with gold and copper metallics; snow white with cool greys and white plus gold and copper metallics; and pecan with warm beige, greys, butterscotch, copper and white plus gold and copper metallics.

Popular-priced Flor-Ever inlaid vinyl, a marble chip design is now available in three new colorations—pecan with white flakes, cloud grey with white flakes, and tan with yellow flakes.

Ultima, inlaid linoleum with the best qualities of vinyl, has four new colorations—tawny tan with yellow, off-white and tangerine accents; opal white with green, blue-violet and plum accents; happy blue with white, beige and blue-green accents; and beige with white, blue-green and blue-violet accents.

Congoleum-Nairn's modestly priced, flexible, and indentation-resistant Wonderflor solid vinyl tile has 16 new additions. They include nine marbelized "parfait" colors—white, pink, turquoise, beige, lavender, green, grey, mocha, and yellow, all on white; two woodhues—one light, one medium; and five metallic decorations—light and dark beige, black, white, and grey, all with gold metallic chips plus silver, gold and copper metallic sparkles.

Congoleum-Nairn Inc.
195 Belgrove Drive
Kearny, New Jersey

See advertisement, page 80

LUMBER—STUDS

WESTERN PINE ASSOCIATION

Spliced finger-jointed 2×4 and 2×6 lumber manufactured by Western Pine Association mills under the Association's quality control program is now being used for studs, cripples, trimmers, plates and other items on FHA-insured projects. Powerful wood-welding glues gripping the seasoned wood insure strength as well as straightness.

Western Pine Association
Yeon Building
Portland 4, Oregon

RAILINGS

PENN METAL COMPANY, INC.

New Penmetal expanded aluminum architectural mesh adds distinction to the railings for terraces and outside corridors of the new Park City Estates, apartment project in Forrest Hills North, Long Island, New York.

The mesh, "Cascade," is one of several new patterns developed expressly for architectural applications by Penn Metal Company, Inc. With its high percentage of open area, Cascade is reminiscent of delicate wrought iron. Yet, it is strong, durable, and low in cost.

The new Penmetal architectural meshes differ from conventional expanded metal in that the openings are neither the usual diamond shape nor necessarily all the same size. Cascade has openings of two sizes which recur in a regular pattern.

The architectural meshes, however, are made in the same manner as conventional expanded metal. A metal sheet, of either aluminum or carbon steel, is slit and then expanded up to ten times its original width. None of the metal is lost in the process. The formation of the truss pattern adds to the sheet's rigidity and strength.

Finished sheets can be cut, formed or shaped; welded, brazed or soldered; used plain, or galvanized, tinned, polished, plated, painted or enameled. In the case of Park City Estates, the sheets were cut to size and then framed in aluminum to provide a filler between the railing and the floor. The balcony railings were fabricated by Michael Flynn Manufacturing Company.

Penn Metal Company, Inc.
40 Central St.
Boston 9, Massachusetts

See advertisement, page 81

SANDWICH PANELS

ALUMINUM COMPANY OF AMERICA

Trussgrid, a new honeycomb-core material fabricated of Alcoa aluminum foil by General Grid Corporation, now makes possible sandwich panels that are stronger in all dimensions than conventional honeycomb-core panels.

Trussgrid is formed by cross-laminating layers of corrugated foil. Corrugations of each foil layer form a 90 degree angle with those of its neighbor. Thus channels in alternate layers of foil run in the same direction, providing strength and rigidity in three planes.

This unique cross-laminated design originated by General Grid permits Trussgrid to fit both light and heavy load-bearing situations. Where the load is light, as in wall partitions, the rigid core can be used without structural facing, or a decorative facing can be applied directly to the foil. In thin-faced sandwich panels, the high strength core can carry a large share of the flexing and compression loads. Trussgrid can also be used where load application cannot be controlled, as it resists 25 times more crushing force—applied perpendicular to the cell axis—than conventional hexagonal honeycomb core.

Trussgrid can be shaped easily by roll-forming and by crushing. Cell reinforcement—usually in the form of ice, resins, or waxes—to permit

efficient machining is not required. The material's natural venting characteristics promote bonding with all types of adhesives without having to perforate cell walls for the escape of gases.

Aluminum Company of America
764 Alcoa Building
Pittsburgh 19, Pennsylvania

OLIN MATHIESON CHEMICAL CORPORATION

A new modular aluminum-panel structural system has been developed by International Structures, Inc. around a laminated building panel designed to utilize the advantages of aluminum, plastic foam, and pressed board. This sandwich panel consists of (1) an exterior surface of textured and baked enameled aluminum sheet; (2) a 2″- or 3″-thick core of foam polystyrene plastic insulation which is fire retardant, moisture- and termite-proof, and will not rot or warp (a 2″ thickness of this closed-cellular core material has the thermal insulation value of 7″ of glass fiber, while a 3″ thickness is equivalent to 9½″ of glass fiber); and (3) an interior surface of tempered hardboard that can be painted, wallpapered or finished in any other conventional way for interior walls.

These panels can be used either as curtain walls or as load-bearing members that also support the roof. They were demonstrated recently for the first time in an aluminum-paneled recruiting booth designed and built in Brooklyn for the Army by International Structures, Inc. In addition to forming walls, laminated panels form the booth's floor and roof, with the aluminum side turned to the exterior in each case and coated with weather-resistant paint. The floor is covered with asphalt tile cemented to the pressed board. The booth's cost was less than that of older-type recruiting booths made of plywood or wooden siding.

The booth's structural frame, windows, door frames, and panel-joined assemblies all are made of specially designed aluminum extrusions supplied by the Metals Division of Olin Mathieson Chemical Corporation. Aluminum door jams and hinges, all trim, and aluminum windows of the sliding, jalousie or casement type were designed and manufactured to fit the modular system.

Because the panels, structural frames, and most other components can be fabricated on an assembly line, shipped directly to the building site, and the structure erected in a day or two, a building erected by this system can be disassembled for transporting to another site just as easily and rapidly as it was first put up. Therefore, the market for this type of construction can include such a wide variety of buildings as schools, summer cottages, beach cabanas, motels, Swiss-type hospital pavilions, homes of all price ranges, and many military structures.

International Structures, Inc.
200 East 42nd Street
New York 17, New York

SIDING—REDWOOD

SIMPSON REDWOOD COMPANY

A new line of certified kiln-dried redwood products, including bevel siding, which are factory-primed and back-treated with a water repellent to add increased color life to California redwood has been introduced by Simpson Redwood Company. Products treated with this Lifecoat process are available in Sequoia Red, Autumn Brown, and Driftwood Gray stains and a neutral paint prime.

The Lifecoat finish retains the natural redwood coloring and accents the wood's grain and texture. The protection of the Lifecoat treatment eliminates "weather worries," as the siding can be installed in rainy weather without absorbing moisture, and final finishing may be delayed as long as necessary.

Harlan Associates, San Francisco, a paint-testing laboratory, conducted tests for Simpson on the Lifecoat redwood products for weathering, wicking, blister resistance, prime coat compatibility with finish paints, water repellency, primer coat thickness, and ease of finishing.

In the tests, Lifecoat factory-primed redwood, without a final coat, indicated ability to withstand approximately one year of exposure without failure, and even after this exposure, was in excellent condition to receive a final coat. The tests showed that Lifecoat siding will arrest wicking—the capillary seepage of water between siding laps.

The tests further revealed that Lifecoat products need no additional backpriming; require only one additional finish coat; are resistant to fungi and mildew; are highly resistant to blistering; and the uniform, factory-applied prime surface coat is easier to brush and takes less paint to cover than ordinary job-applied primers.

Simpson Redwood Company
2031 Washington Building
Seattle, Washington

WINDOWS

ALUMINUM COMPANY OF AMERICA

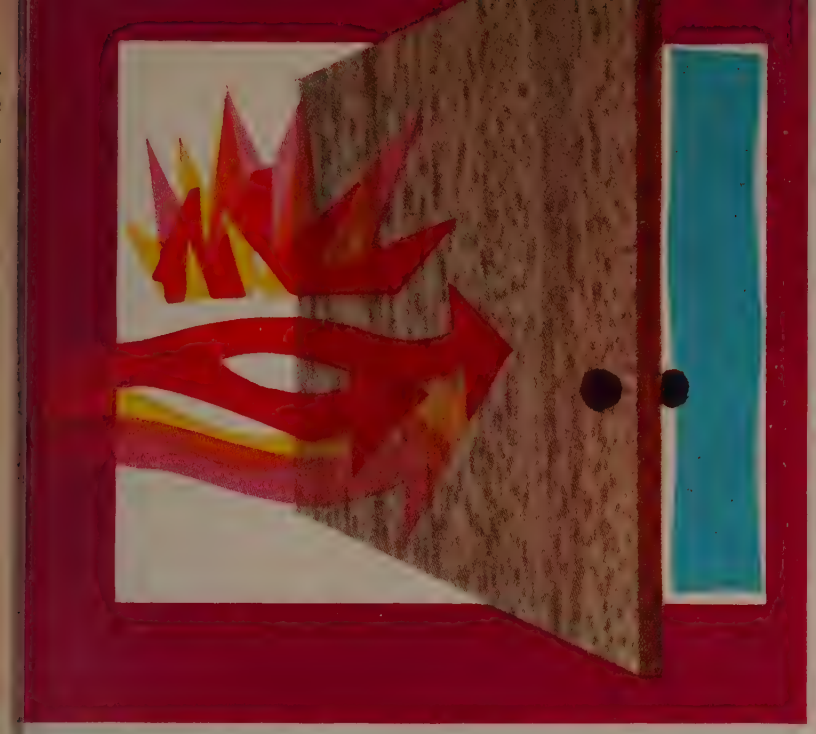
A new window introduced by Kota Products and framed in aluminum supplied by Aluminum Company of America showed amazing frost-free results under condensation tests conducted by the United States Testing Co., according to Kota.

In a test room where the interior temperature was 70 degrees above zero and the exterior temperature was 20 degrees below zero, condensation did not appear on the insulated window until relative humidity reached over 53 per cent on the interior side—abnormally high for winter.

The "Kota Thermo-Insulated Window" is made in labor-saving stud modular sizes, from two to seven studs in width, and in heights of two, three, four, and five feet. Both inner and outer ventilators are weather-stripped with wool pile around the entire perimeter on both interior and exterior sides. The ventilators glide on specially designed polyethylene guides, wax impregnated for lifetime smooth operation.

Other features include sloping stepped sills and sloping heads, vinyl glazing, and self-locking handles.

Kota Products
Rocky Point, Long Island
New York



ready-to-hang doors
to meet your specifications

RE PROTECTION means more than just stopping flame spread. Weldwood wood-ced Fire Doors do that, and they also greatly reduce destructive heat trans-ission. Underwriters' Laboratories, Inc., rates and labels these doors for fire sistance and assured maximum protection against heat transmission (250°F. aximum on cool side after exposure for 30 minutes to 1700°F. on hot side) in th Class "B" (vertical shaft) and Class "C" (room and corridor) openings.

XTRA-WIDE residential entrance doors have special demands placed on their con-ruction. Weldwood Stay-Strate® Doors have warp-proof Weldrok® mineral res and hardwood edges that provide the strength and stability necessary in oors up to 4 feet wide. The wide range of beautiful hardwood faces, with atching edges, lets you give continuity to luxurious wood paneled interiors.

FROM FIT TO FINISH, WELDWOOD DOORS COME TAILORED TO YOUR DESIGN

Now you can specify any Weldwood® Algoma-made Door cut to fit your openings, machined to take your hardware, and finished to meet your requirements. Included among these custom-made doors are new Permagard™ Doors for interior use—surfaced at the factory with a thin, tough, invisible plastic resin film for unprecedented beauty and wear-resistance.

Weldwood's custom door service eliminates costly on-site labor, drastically reduces handling, and provides the installer with precision-assured satisfaction. Weldwood Doors are available in a wide range of sizes and constructions to meet each installation's requirements for fire protection, sound resistance, ruggedness, and low maintenance beauty.

THE WELDWOOD DOOR GUARANTEE

United States Plywood unconditionally guarantees Weldwood Stay-Strate, Fire, and Acoustical Doors against warping, twisting, or manufacturing defects for the life of the installation, when accorded treatment considered good practice as far as storage, installation, and maintenance are concerned. If any of these doors fails to meet these standards, United States Plywood will replace it without charge, including all labor costs of handling and refinishing.

SEE OUR CATALOG IN SWEET'S, OR MAIL THE COUPON ON THE OTHER SIDE OF THIS PAGE.

WELDWOOD ALGOMA-MADE DOORS

Products of United States Plywood

◀ SOUND CONTROL with beautiful wood-faced Weldwood Acoustical Doors is both economical and effective. Based on current testing standards (ASTM E-90-55) for 1¾" soundproof doors, Weldwood Acoustical Doors achieved an *assured* decibel rating of 35 db.

The fascination of real wood paneling's grain patterns and color variations makes other decoration superfluous on Parke, Davis and Company's board room walls. Nothing artificial or superimposed here, just the tree-grown beauty of Brazilian rosewood in Weldwood® Architectural blueprint-matched panels, Algoma-made.

Weldwood paneling makes each wall you design an original masterpiece

Prestige and a wood paneled office go together. A handsome example is the President's Office of Parke, Davis in Detroit, paneled in honey-colored matched teak of Weldwood Algoma-made Architectural panels. Architects: Marr & Marr, Detroit.

Because no other wall material can give the one-of-a-kind beauty and warmth of real wood, each Weldwood paneling installation you specify results in an original and incomparable design — as unique as the tree that grew the wood.

In Weldwood Algoma-made paneling, you have at your disposal the "world's largest library of fine woods." You may choose either from stock panels, or from panels that have been matched to your own blueprint and finished to your own specifications.

For details, mail reply card at back of book.

WELDWOOD

REAL WOOD PANELING

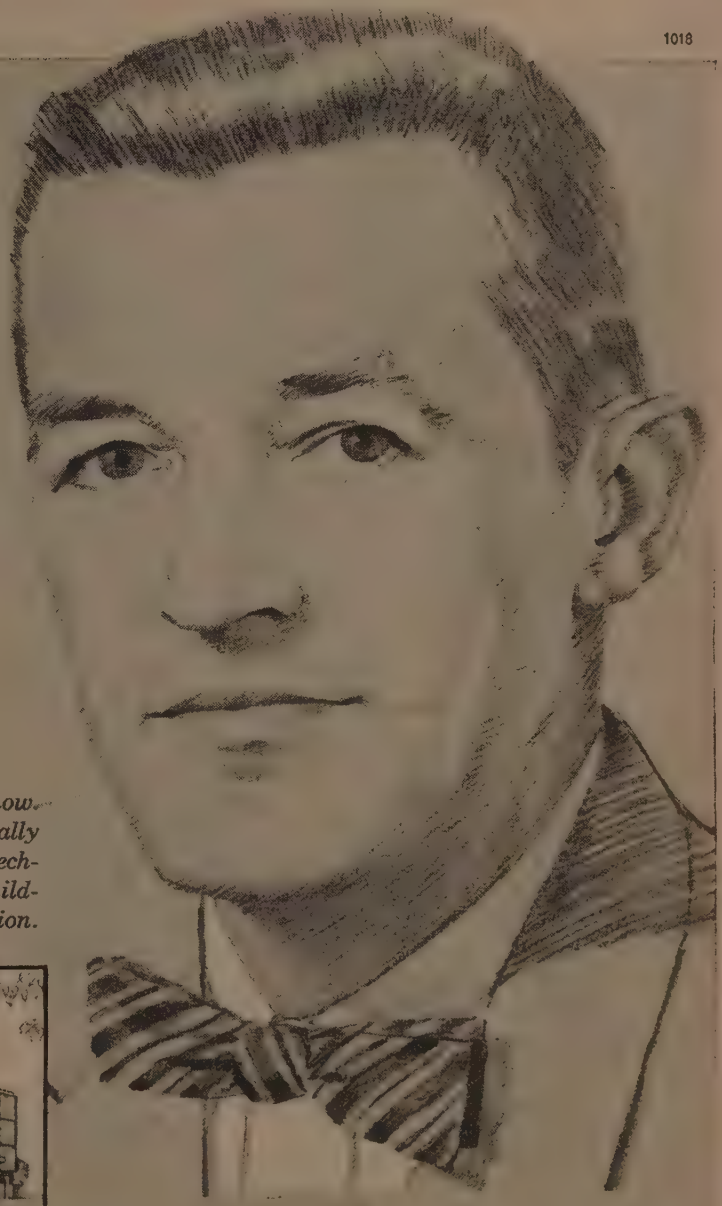
Product of United States Plywood • 136 showrooms in the United States and Canada

Men who know their hardware choose NORTON...

"because every Norton door closer installation is backed-up by personal service from Norton's representative"

says **LEO A. HEBERT, A.H.C.,** Jackson Hardware Supply Company

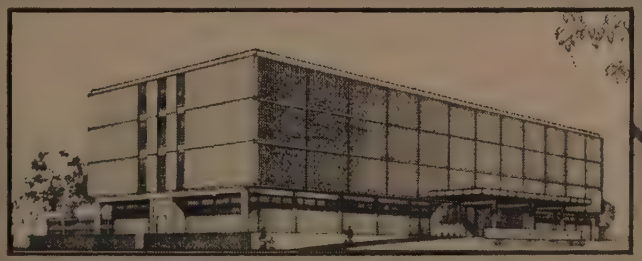
1018



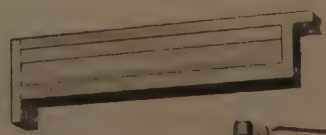
"When I'm consulted on the hardware for a project I'm always glad to recommend Norton closers. I know I can rely on Norton. In servicing our jobs the Norton representative stands behind me and my company with personal service. Nothing is more disappointing to the owner of a new building than to have door closers that aren't operating just right. Our Norton representative is always happy to assist us in seeing that each closer is adjusted before a building is turned over to the owner."

Mr. Hebert supplied Norton door closers throughout the new Children's Hospital in Birmingham, Alabama. His Norton representative helped him inspect and adjust the door closers before the hospital was put into operation. Just one of the many services that has given Norton an 80-year reputation for quality, service, and dependability.

Your hardware consultant is a good man to know. He's a specialist in the selection of architecturally compatible hardware. His esthetic tastes and technical skills assure you of hardware for your building that is compatible with design and function.



Children's Hospital, Birmingham, Alabama
Architect: Lawrence S. Whitten, Birmingham, Ala.
Contractor: Daniel Construction Co. of Ala., Birmingham, Ala
Distributor: Jackson Hardware Supply Co., Birmingham, Ala.



Series 750 Corner Closer: Narrow corner-mounted for exterior doors.

Series 1500 Trimline Closer: Compactness, versatility, and unobtrusive styling for exterior and interior doors.

NORTON® DOOR CLOSERS
372 Meyer Road, Bensenville, Illinois

Through Research...A Technological Triumph...

Matico Polymerite™...A New Concept in Floor Tile

***GREASE RESISTANT...STAIN RESISTANT...FLAME RETARDANT...PRICED COMPETITIVELY WITH ASPHALT TILE!**

From an intensive program of research and development, Matico now proceeds to change all existing concepts of flooring with a tile that is years ahead of its time. Matico Polymerite Floor Tile has the characteristics of the finest floor tile—all at a remarkably low cost! Wears up to twice as long as asphalt tile too!

This astonishingly low-cost, easily-maintained tile resists grease and stain, and is flame-retardant. It has optimum flexibility, maximum uniformity gauge control and appears in 32 vibrantly alive colors, every hue of which is under the most rigid technological control.

Now the sky is the limit on flooring specifications at astonishingly ground-level cost. Matico Polymerite Floor Tile finally opens the door to superlative flooring for every application. Be sure that you get the specifications on Matico's Polymerite Floor Tile right away. Your Matico representative can furnish them. Or, write today.

MATICO®
FLOOR TILE
A QUALITY PRODUCT OF
RUBEROID®

The RUBEROID Co., P.O. Box 129, New York 46, N.Y.

*Matico Polymerite Tile conforms to Fed. Spec. SS-T-306b for Asphalt Tile and SS-T-307, Grease Resistant, Asphalt Tile; and the flame retardant qualities of Military Specification MIL - T-18830 (Ships).

INTERESTING DESIGN+NATCO BRICK=MODERN GARAGE

Graceful, modern architectural design, plus the beauty of smooth, unglazed, buff-colored Natco face brick sets this new downtown Boston parking garage apart as one of the finest in the country.

Apart from being simply a functional structure capable of handling 734 automobiles, this 12-level garage makes an aesthetic, architecturally pleasing contribution to the City of Boston's redevelopment program.

Clear ceramic glazed Vitritile, also made by Natco, was used to face interior walls in the garage office, wash rooms, attendants' quarters and warming rooms for elevator operators. Low maintenance costs result since this structural facing tile requires only a periodic wiping to retain a clean, cool, new appearance.

The architect, Mr. S. S. Eisenberg, referring to the new parking garage stated, "We tried to provide modern design with the best materials available."

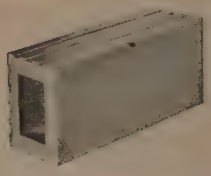
NATCO QUALITY CLAY PRODUCTS SINCE 1889

NATCO CORPORATION

General Offices: 327 Fifth Avenue, Pittsburgh 22, Pennsylvania. Other Branch Sales Offices: Boston, Chicago, Detroit, Houston, New York, Philadelphia, Pittsburgh, Syracuse, Birmingham, Ala., Brazil, Ind. In Canada: Natco Clay Products Ltd., 55 Eglinton Ave., E., Toronto

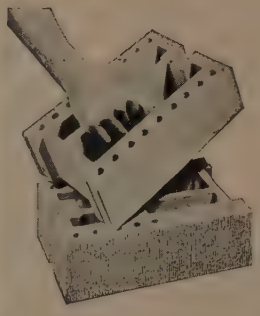
ALWAYS LOOK TO NATCO

for the complete line of structural clay products for quality masonry construction



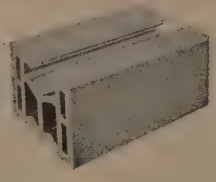
CERAMIC GLAZE VITRITILE

Furnished in nominal 2", 4", 6" and 8" thicknesses in ceramic color, speckled and clear glaze finishes. Provides permanent interiors with little maintenance. Complete shapes and fittings furnished. Nominal face sizes: "8W" Series 8"x16", "6T" Series 5⅓"x12", "4D" Series 5⅓"x8". Write for shape catalogs.



UNIWALL FACING TILE

Tile Face Size 3⅝" x 11⅝" available in Buff Range Rugg-Tex Exterior Finish - Ceramic Glaze Interior Finish for single unit wall construction. Manufactured from the highest quality fire clay to conform to all A.S.T.M. and Federal specifications for load-bearing facing tile.



DRI-SPEEDWALL TILE

For complete load-bearing nominal 8" wall construction or multiple unit walls utilizing supplementary 2", 4" and 6" stretchers and standard fittings. Full stretcher units, nominal size—8" x 5⅓" x 12". Colors: Buff Unglazed, Salt Glazed and Red Textured.

OTHER NATCO CLAY PRODUCTS

- Speed-a-backer Tile
- Speedtile
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- Bakup Tile
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- Ceramic Glaze Vitribrik, "4S" Series
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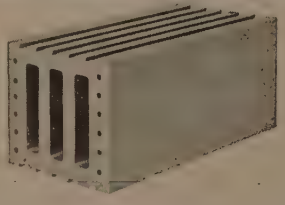
- Stairtread Tile
- Natcoustile
- Natcoflor
- Combination Floor Tile
- Clay Flue Lining
- Clay Drain Tile
- Clay Sewer Pipe
- Vitri-Seal Pipe
- Wall Coping Tile
- Clay Stove Liners
- Flashing Tile
- Chemtile
- Kiln Floor Brick
- Natsol Solar Screens

Write for General Catalogs S-61 and SB-61



"FIREPROOFER" TILE

This Heavy-Duty Fire Resistant Unit is designed primarily for stairway and elevator enclosures, or other areas where a single unit 6-inch wall is required with a 2-hour fire resistance rating. Furnished in a ceramic glaze finish on one face only in a variety of colors. Size: 5⅛" high x 11¾" long x 5¾" thick.

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Manufactured from highest quality clays, Natco facing brick is perfect for interiors and exteriors of modern buildings. Natco Ceramic Glazed Velour and Speckled brick is furnished in many attractive colors. Unglazed facing brick is furnished in red, buff and gray ranges in Standard, Roman and Norman sizes and in various textures.

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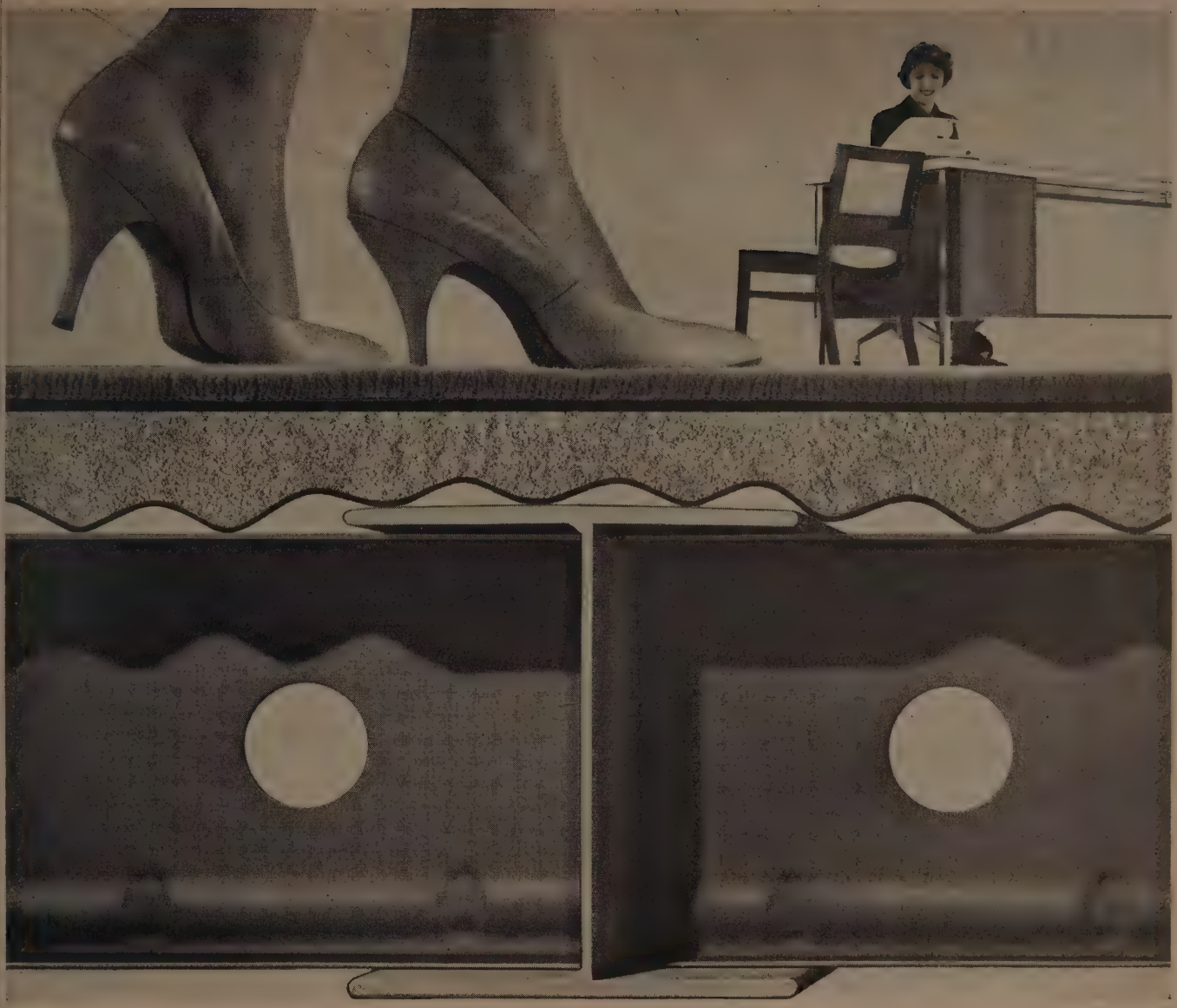


Modern lightweight floor system trims building costs

The sheer simplicity of good design makes Stran-Steel's complete and completely modern floor and roof system first choice of cost-conscious architects. Completely compatible joists, wide-flange beams and decking reduce coping, cutting and detailed drawing. Collaterals are easily and quickly attached because this light steel system is *nailable*. Joists are so light cranes are seldom needed. Thinner but stronger floors reduce building height appreciably. High strength-to-weight ratio cuts foundation costs. You save time, materials and money.

For details, mail the postcard or call the dealer near you. He's listed in the Yellow Pages under STEEL.

See 1961 Sweets Catalog Service, Industrial Construction, File No. 2a/Str.

STRAN-STEEL lightweight floor and roof system trimmed costs in this modern 4-story office building in Bethesda, Md.

Stran-Steel®

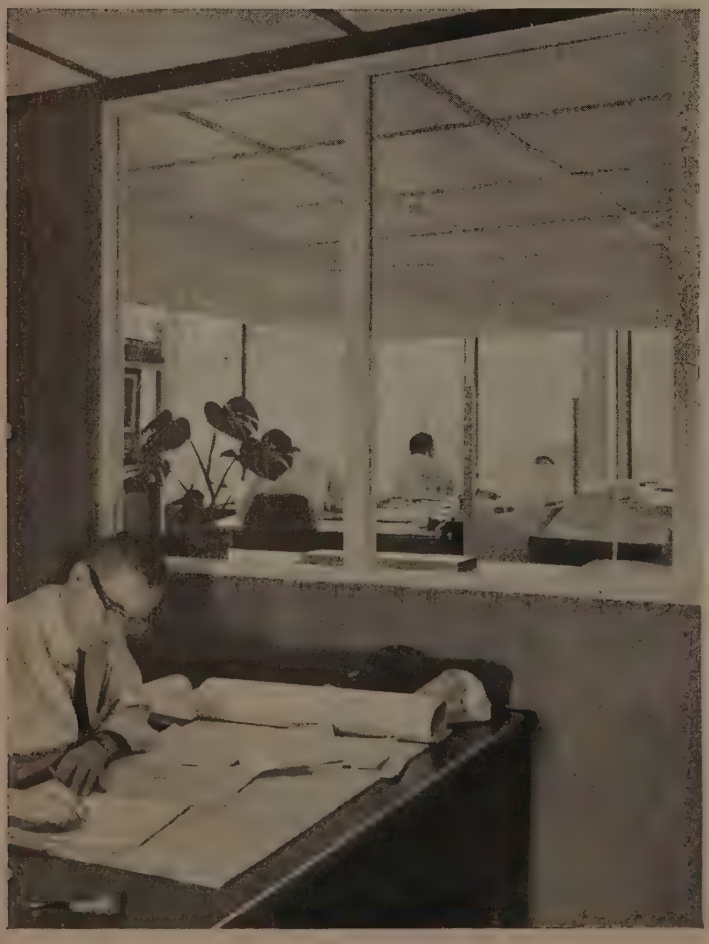
For More Information, Please Use Postage-Free Postcard at Back of Book

STRAN-STEEL IS A DIVISION OF **NATIONAL STEEL CORPORATION**

"Our efficiency went up about 20%..."

SAYS TOLEDO ARCHITECT

Drafting room has floor-to-ceiling window walls of *Thermopane*® insulating glass with glare and heat reducing *Parallel-O-Grey*® in the outer pane.



For years the 70-employe engineering-architectural firm of Samborn, Steketee, Otis and Evans worked in an old-fashioned building. The firm was founded in 1948 in Toledo, Ohio. It offers complete engineering-architectural services for all types of building projects.

On July 1 of last year, the concern moved to the new Libbey·Owens·Ford Building, whose exterior walls are 90% glass.

"The change was startling," says E. J. Otis, Jr., Partner. "In less than a month we noticed a big improvement in the quality and quantity of work turned out, and a change for the better in employe and client relationships."

GREATER EFFICIENCY

John H. V. Evans, Partner, says efficiency rose about 20% the first month, and it has stayed at a high level. The firm is getting more results per dollar spent, despite the five times per sq. ft. increase in rental. This can be attributed to a better layout, better communications between employes, and a better work environment. Glass has contributed greatly in the latter two categories.

Job captain's office has L·O·F Plate Glass window through which visual communications with his workers can be maintained.

L·O·F *Parallel-O-Plate* side lights and door enhance the entrance of Samborn, Steketee, Otis and Evans.

The glass in these partitions is L·O·F Rough Plate. Decorative, it provides privacy and transmits light.

Through a series of inner offices with plate glass windows, work captains can visually communicate with their staffs. A beckon of a hand tells them when they're needed. And for consultations outside their office, there's a glass-topped "quiet" booth (see photo left above) where problems can be discussed without disturbing workers nearby.

More efficient use of floor space in drafting areas is possible because the floor-to-ceiling perimeter windows are *Thermopane*® insulating glass. Drafting boards can be shoved right up to the windows, yet draftsmen are comfortable. And since *Thermopane* muffles outside noise, there are fewer distractions.

WORKMANSHIP IMPROVED

The work quality has improved because the window walls and the luminous ceilings provide an abundance of light. The daylight is glare-conditioned. The outer panes of the *Thermopane* are L·O·F *Parallel-O-Grey*® Plate Glass which transmits approximately 45% of average daylight to reduce glare on the inside, and excludes approximately 40% of the solar energy for heat reduction. Although *Parallel-O-Grey* has a neutral grey tone, the colors of objects seen through it remain essentially unchanged. And since the windows are sealed, outside dirt cannot infiltrate to settle on drawings.

EMPLOYE RELATIONS IMPROVED

Employes are less restless . . . do less wandering around. They dress neater . . . take more pride in their work. Job applications have increased, and no one has left.

Clients are impressed with the professional atmosphere of Samborn, Steketee, Otis and Evans' new offices. The principals feel certain that their efficient, well-lighted new quarters have brought them business.

For information on L·O·F products, refer to Sweet's Architectural File 26-A, or call your L·O·F Distributor or Dealer (listed under "Glass" in the Yellow Pages). Or write to L·O·F, 1331 Libbey·Owens·Ford Building, Toledo 1, Ohio.

LOF GLASS
THE QUALITY MARK TO LOOK FOR

LIBBEY·OWENS·FORD

Light-colored floor? Vinyl problem? Anti-slip requirement?

Super Flor-Treat is your answer!

For a beautiful anti-slip floor finish, you can specify MULTI-CLEAN *Super Flor-Treat* for practically any type floor . . . asphalt, rubber, or vinyl tile . . . linoleum . . . terrazzo . . . wood . . . or concrete.

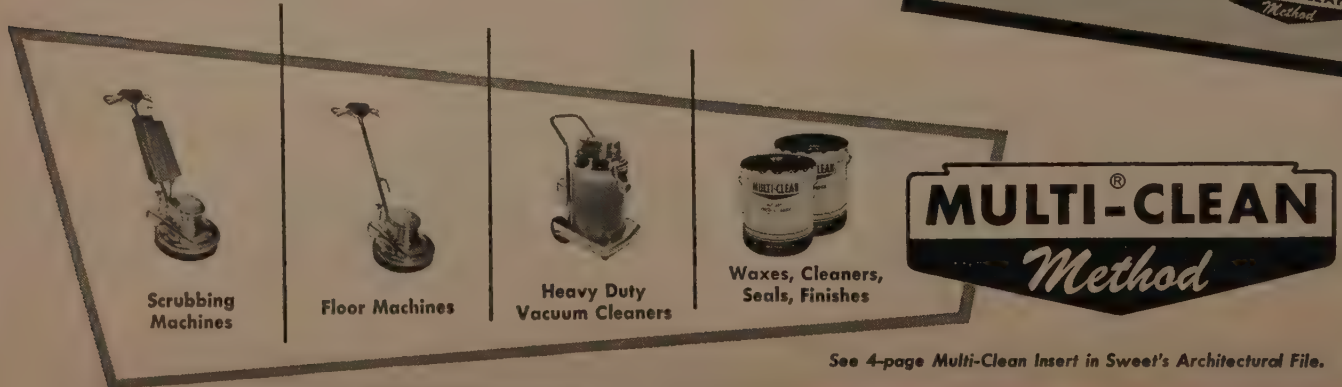
But there are certain situations where this modern all-resin finish is a real problem-solver. For example:

For Light-Colored Floors . . . Water-white *Super Flor-Treat* dries to a light-colored finish that won't yellow the lightest of floors (not even white ones!).

When Insurance Regulations Prohibit Use of Wax . . . *Super Flor-Treat* gives a brilliant, self-polishing, easy-to-clean finish that will match the best waxes *in every respect* including scuff-resistance, buffability, and ease of removing. It's listed by U/L as anti-slip.

On Vinyl Tile . . . and other floors to which wax will not adhere satisfactorily, *Super Flor-Treat* may be applied without crawling or puddling. On such floors it is often used as a base for wax. In fact, wax lasts longer when *Super Flor-Treat* is used as a base.

For complete information on *Super Flor-Treat* and other MULTI-CLEAN sealers, finishes and cleaners . . . and handy ready-to-use specifications for the treatment of any common type floor (see opposite page), call your local MULTI-CLEAN Floor Care Specialist or use card in back of this Technical Bulletin.



See 4-page Multi-Clean Insert in Sweet's Architectural File.

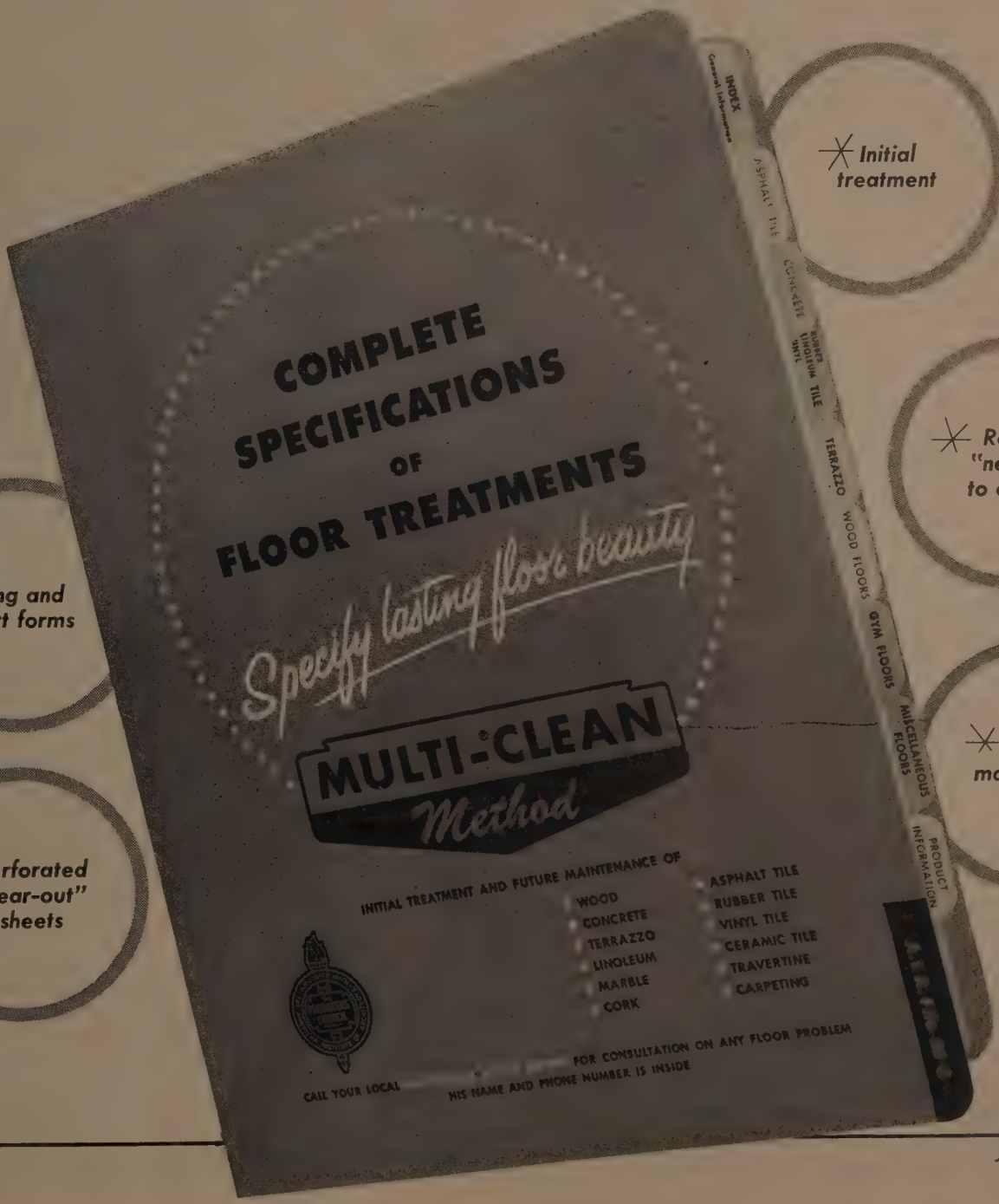
Complete Specifications for proper treatment of all type floors *(use the card at the back of this bulletin to order your free copy)*

Here, in handy perforated "tear-out" form, are complete specifications for treatment of all type floors.

Bound ten-sheets-to-a-pad, there are separate sections for asphalt tile, concrete, rubber tile, terrazzo and oxychloride, vinyl and vinyl asbestos, and wood. Ceramic tile, cork, linoleum and marble are also included.

These specifications are based on the scientific MULTI-CLEAN METHOD. They cover initial treatment of new floors, future maintenance, and restoring the new look to old floors. Both long and short forms are included for your convenience.

Expert local consultants. A trained MULTI-CLEAN floor maintenance specialist is available in every metropolitan area where there is a Chapter of The Producers' Council. He'll be glad to assist you in any floor care problem you may have. If he's not listed in your telephone directory, write to MULTI-CLEAN PRODUCTS, INC., St. Paul 16, Minnesota, for his name.



✳ *Initial treatment*

✳ *Restoring "new look" to old floors*

✳ *Long and short forms*

✳ *Future maintenance*

✳ *Perforated "tear-out" sheets*

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MULTI-CLEAN® Method

New Pan American World Airways Passenger Terminal, New York International Airport.

Architects and Engineers: Tippetts-Abbett-McCarthy-Stratton, New York.

SARALOY® 400

frees design from conventional flashing limitations, cuts flashing labor costs 25% for new air terminal

45,000 square feet of Saraloy 400 roof flashing provide hundreds of *permanent* moisture seals for this ultra-modern air terminal. Among the many critical flashing problems solved by Saraloy 400 were: sealing 875 acute and obtuse angles created by almost inaccessible junctures of structural steel beams and purlins; flashing steel-to-concrete joints and lining scupper holes.

The design of the terminal's elliptical cantilevered roof produced 144 different odd shapes and angles where beams, purlins and equipment housing shells meet. Flashing with conventional materials would require that each seal be specially cut and custom-fitted, often to match curved contours. The labor costs for installing metal flashing would have been prohibitive. Because Saraloy 400 could be quickly and easily cut and formed on the job, labor costs were about 25% less than the cost of installing conventional flashing materials. And each seal is permanent.

Saraloy 400 is Dow's brand of flexible roof flashing. It can be bonded to almost any construction material, such as concrete, wood, metal, ceramic, and it can be painted. It provides a permanent watertight seal which won't check, peel or crack . . . and which moves with building contraction and expansion. For more information write to THE DOW CHEMICAL COMPANY, Midland, Michigan, Plastics Sales Dept. 1501GB3.

Saraloy accomplishes difficult flashing of bolted girder-purlin intersection

OTHER DOW BUILDING PRODUCTS

STYROFOAM* — Long-lasting insulation for cavity walls; effective insulating base for plaster and wallboard. Rigid, low "K" factor, highly resistant to water and water vapor.

SCORBORD* (pat. applied for)—Superior rigid insulation for foundation perimeters, slab floors. Exclusive pre-scoring speeds installation.

ROOFMATE*—Lightweight, rigid insulation for built-up roofs serves as its own moisture barrier. Reduces blistering, resultant leaks. 2′ x 4′ boards speed installation. *TRADEMARK

THE DOW CHEMICAL COMPANY DOW Midland, Michigan

Architect: Firestone & Molter

Terrazzo Craftsman: D. Bernardon

Protection . . . . PLUS

The tiger has long been a symbol of protection . . . and this life-like terrazzo mosaic (the Washington High School emblem) will 'guard' the building throughout its life span.

The craftsmanship shown here illustrates the quality and versatility of terrazzo; the craftsmanship available by member firms of the National Terrazzo & Mosaic Association.

Terrazzo . . . the 'Tiger' of flooring materials, offers the architect . . . the owners . . . protection *throughout the life of the bond issue* (and longer). Protecting against high maintenance and replacement costs . . . against fire . . . against the fashionable 'spike' heels.

Independent laboratories, research analyists and magazines have issued articles and reports . . . presenting the facts . . . reminding you that FLOOR SAFETY IS *NO ACCIDENT*.

● (Foster D. Snell Inc.) An independent testing laboratory tested and rated Terrazzo 20% safer than the minimum requirements set up by Underwriters Laboratory Inc.

● (Modern Sanitation, Dec. 1960) "The problem is pockmarks on our asphalt tile floors caused by the extremely small heels the office girls are wearing today . . . a survey conducted by the Building Research Institute in 1958 showed this (indentation) to be the most common complaint against resilient floor covering by architects and building contractors, owners and managers. . . . On carpet, they often snag, cause sprouts, cut pile and sometimes puncture backing."

● (Consumer Report, Oct. 1960) Carpet Flammability . . . "Consumers have been offered an entirely new group of fibres whose use in carpets covers only a few months . . . if flames should reach this material, its inherent flammability could determine whether the blaze would remain small and isolated or spread from room to room."

● (Ultimate Cost of Flooring, Dec. 1959) Reports *that the ultimate maintenance cost* was computed for Asphalt Tile $56.48, Vinyl Tile $43.77 and only $35.30 for Terrazzo. The report summarizes: ". . . that every square foot of Terrazzo used instead of asphalt tile it saves enough over a 50 year period to pay for the entire construction cost."

DIVIDER STRIP LOCATION AND DATA

(From the revisions to appear in the new N.T.M.A. Architectural File.)

THE PURPOSE OF DIVIDERS IN TERRAZZO ... is twofold. They control and localize setting shrinkage as well as flexure cracks, when they occur. They also permit the laying of different color mixtures in various patterns with ease and accuracy. The gauge and thickness of the divider does not affect the dividers purpose.

Fractures in terrazzo are caused by structural movement, expansion, contraction, or by vibration. Crazing, or cracks from shrinkage, does not occur in properly laid terrazzo. The shrinkage of terrazzo is largely governed by the installation technique and by the rate of evaporation from the surface. Thorough and sufficient rolling is necessary to minimize shrinkage and prevent crazing. Proper curing methods will check evaporation. Correctly located dividers will eliminate promiscuous fracturing.

SAND CUSHION (Floating) TERRAZZO ... is a type of terrazzo floor construction that is affected least by structural movements. It is recommended as the most effective method when the use of the deeper sub-bed is warranted as insurance against cracks; as in pattern work, lobbies, corridors and areas where a desired appearance is important.

PATTERN AND DESIGN WORK ... plan the layout of the lines of divider strips to form the desired panel sizes or design. Inconspicuous colored dividers may be used where needed to carry these main divisions through patterns. Pre-assembled units dividing only the terrazzo topping are made up for patterns and decorative work; as are letter, numbers, designs, etc. The preparation of such work is best accomplished in the shops of the divider manufacturers who have equipment and men to do it accurately.

RECOMMENDATIONS FOR PLANNING, SUPERVISING AND INSTALLING DIVIDER STRIPS:

1. FLOORS AND BORDERS: Carry a line of division through to the wall, unless special provisions are made. Do not let the line of division stop in the field or border; but continue it through to the wall or the edge of the terrazzo. Failure to do this has resulted in much cracking that is entirely needless. Always carry a divider out through the border from a column or pilaster corner. Where wall base is used, the dividers in it serve best when on the line of a floor division. It is common practice to place them opposite alternate floor strips.

Locate the dividers at critical points to localize and control the fracture if and when movement occurs. Such points are tension areas over beams, girders, supporting walls, columns and around stair openings. Where an expansion joint occurs or the type of construction changes, always use a divider; and a special type may be needed to provide for the almost certain movement. Whenever feasible, place dividers at points where there is a probable change of stress due to rigidity as at the edges of a beam tee or a dropped column head. An effort to anticipate the lines of probable slab fractures is worthwhile. Place dividers on these lines, whenever possible to serve as bases for the balance of the layout. Diagonal layouts are not recommended, unless inconspicuous or colored dividers are used to follow the horizontal and vertical lines of the building plan.

2. PANEL SIZE: The panel size is dependent on several factors such as; room size and shape, proposed use of the area, importance of floor cost, importance of appearance and decorative consideration. Reasonably small panels are preferable, even though they cost slightly more. Panels of 16 inches to 30 inches are common in floors of lobbies, corridors and public spaces; while stores, commercial work, hospital and institutional rooms, rental and office areas are usually laid in panels ranging from 24 inches up to 50 inches in size.

3. WALL BASE BORDERS AND WAINSCOTS: Each must be divided. Base and border divisions are mentioned above. Sections should not exceed five feet. Wainscots should be divided both horizontally and vertically into panels not exceeding 30 inches in either direction. Small panels are preferable. Shaped dividers for various types of base are stock items, as are strips for wainscots.

BASE BEADS serve as economical grounds for tops of terrazzo bases and wainscoting. They are very rigid and insure a perfect straight and level top for these finishes. These are used where there is a change from terrazzo to some other type of material. The non-ferrous base beads, as manufactured by member firms of the N.T.M.A., permit the grinding of the terrazzo without showing any faults in the bead. The use of ferrous beads will show a rusted finish at the tops after they are surfaced.

SHELF TYPE STRIP is recommended where terrazzo adjoins composition tile, linoleum or similar types of floor. The ledge serves as a perfect guide for height of the cement finish in the field and insures a flush joint.

4. CONDUCTIVE TERRAZZO: To prevent the accumulation of dangerous electrostatic charges, the surface of the floor in operating suites of hospitals shall provide a path of moderate electrical conductivity between all persons and equipment making contact with the floor. The acetylene black conductive terrazzo floors as recommended by the N.T.M.A. meets all the requirements of the National Fire Protection Association. Our special bulletin on these floors covers this subject in minute detail. Only non-conductive heavy top plastic strips can and must be used in these floors.

5. TYPES AND SIZES OF DIVIDER STRIPS: Dividers are made in a variety of sizes. Exposed face thicknesses range from 20 Brown and Sharpe gauge (18 gauge is a recommended minimum) to heavy bars. Dividers of ⅛ inch face and wider are usually of the heavy top type, with a thin bottom member. A 1¼-inch depth divider is recommended for the usual floor thickness. Divider strips at least 1½ inch deep are recommended for Venetian terrazzo floors.

Shallow strips are available for special shallow floors, borders, wainscots, etc. The standard length of all floor dividers is 6 feet 0 inches. Special lengths can be mill or factory cut.

6. MATERIALS FOR DIVIDER STRIPS: The most common used materials for dividers are: half-hard brass, white alloy zinc (99% zinc) and plastic in various colors.

7. ANCHORAGE FEATURES: The anchorage features incorporated in the divider strips are usually more than ample. The divider must function as such and must have sufficient surface to create a line of cleavage in the terrazzo. A continuous lower edge cutting the sub-bed is a needed feature.

8. EXPANSION JOINTS: For long corridors and large areas, a special expansion strip is recommended to locate shrinkage cracks. This strip should be located not over thirty feet on center in long corridors and should be preferably placed over steel beams. This strip is a lamination of 1¼" x 14 white alloy zinc or 1¼" x 16 gauge brass to both sides of 1¼" x ⅛" black neoprene. Adequate anchorage features should be present in the metal strips, spaced not over 6 inches on center, to anchor them to the terrazzo floor on both sides.

For Monolithic terrazzo we recommend a similar type of laminated expansion strip. This should be constructed of 16 gauge white alloy zinc angle or 18 gauge brass angle with the proper depth to match the terrazzo and laminated to ⅛" black neoprene. SUMMARY: The proper use and location of dividers will effectively control and localize such cracks as may occur in terrazzo through the exertion of outside forces that crack or deform any relatively inflexible finishing material. Fracturing (cracking) is not inherent to terrazzo properly laid out and installed.

THE NATIONAL TERRAZZO & MOSAIC ASSOCIATION, INC.

2000 K STREET, NORTHWEST, WASHINGTON 6, D. C.

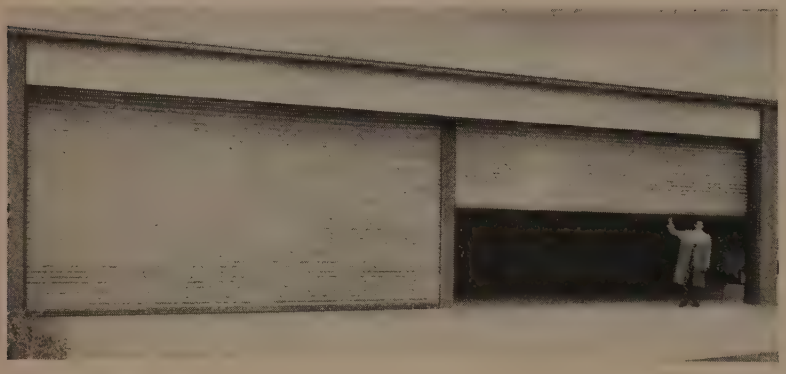
Armco ALUMINIZED

for contemporary

For Durability, Economy and Strength

Steel

Special Aluminum-coated steel, a product of Armco research, helps cut costs and increase structural efficiency.



Armco ALUMINIZED STEEL Type 2 is an architectural metal that combines the surface characteristics of aluminum with the physical and mechanical properties of steel. It is sheet steel coated with aluminum on both sides by an Armco-developed hot-dip process.

Advantages in Architecture

ALUMINIZED STEEL combines two metals in one. It has corrosion resistance vastly superior to that of unpainted galvanized steel and costs less than aluminum. It does not require paint, but can be painted if color is desired.

Durability—ALUMINIZED STEEL Type 2 weathers like aluminum. Both metals look alike after side-by-side exposure in an industrial atmosphere for 10 years. Exposure under similar conditions shows this special aluminum coating has up to 4 times the life of unpainted commercial zinc coatings on steel sheets.

Strength—The steel base of ALUMINIZED STEEL gives it all the advantages of steel—high strength, low thermal expansion, resistance to fire damage, and high modulus of elasticity. Efficient and economical sections for load-bearing components are made of this unique material.

STEEL

architecture

Economy—Its combination of strength and durability make ALUMINIZED STEEL Type 2 exceptionally economical for building units exposed to the weather. In comparison with aluminum, material costs can often be reduced by as much as 30 to 45% if equal thicknesses are used. By taking full advantage of the higher strength of ALUMINIZED STEEL, savings can go as high as 60%. The low differential in cost per square foot for Armco ALUMINIZED STEEL Type 2 over zinc-coated sheet steel is shown in the table.

Approximate Material Cost* of ALUMINIZED STEEL Type 2 and Zinc-Coated Steel

Thickness, in.	Gage No.	Cost—Cents per Sq. Ft. ALUMINIZED STEEL Type 2	Cost—Cents per Sq. Ft. Zinc-Coated Steel
.080	14	.322	.268
.065	15-16	.269	.224
.050	18	.212	.178
.040	20	.173	.145
.026	24-25	.124	.101

*Approximate cost for sheets of a given width and length.

Available Forms and Products

Sheets and Coils—ALUMINIZED STEEL Type 2 is produced in both sheets and coils in a wide range of thicknesses and sizes. You can select the material in the form that meets your needs at minimum cost.

Available Thicknesses and Sizes of ALUMINIZED STEEL Type 2*

Nominal Thickness, in.	Gage No.	Mean Wt. per Sq. Ft., lbs.	Sheet Size Limits Max. Width	Sheet Size Limits Max. Length	Max. Coil Width
.0934	13	3.789	36″	192″	36″
.0785 to .0276	14 to 24	3.164 to 1.039	48″	192″	48″
.0247 .0217	25 26	.914 .789	44″	192″	40″
.0202 .0187	27 28	.727 .664	42″	144″	36″

*Within the limits of .1008″ to 0180″, ALUMINIZED STEEL can be ordered in mill quantities to any given decimal thickness.

Building Products—Because this special aluminum-coated steel offers such obvious advantages, it is used extensively for products such as corrugated roofing and siding, floor and roof deck, building panels, and interior facing for curtain walls. ALUMINIZED STEEL Type 2 is also used for a wide variety of other building products that require sheet metal with high strength and durable resistance to weathering.

Consider the special advantages offered by this architectural metal. Write us for complete information on the properties of ALUMINIZED STEEL Type 2 and data on its application in building products. Armco Division, Armco Steel Corporation, 1381 Curtis St., Middletown, Ohio.

ARMCO **Armco Division**

Men who know their hardware choose NORTON
and the new Series 1500 Trimline closer

"because the Trimline offers complete design harmony and flexibility"

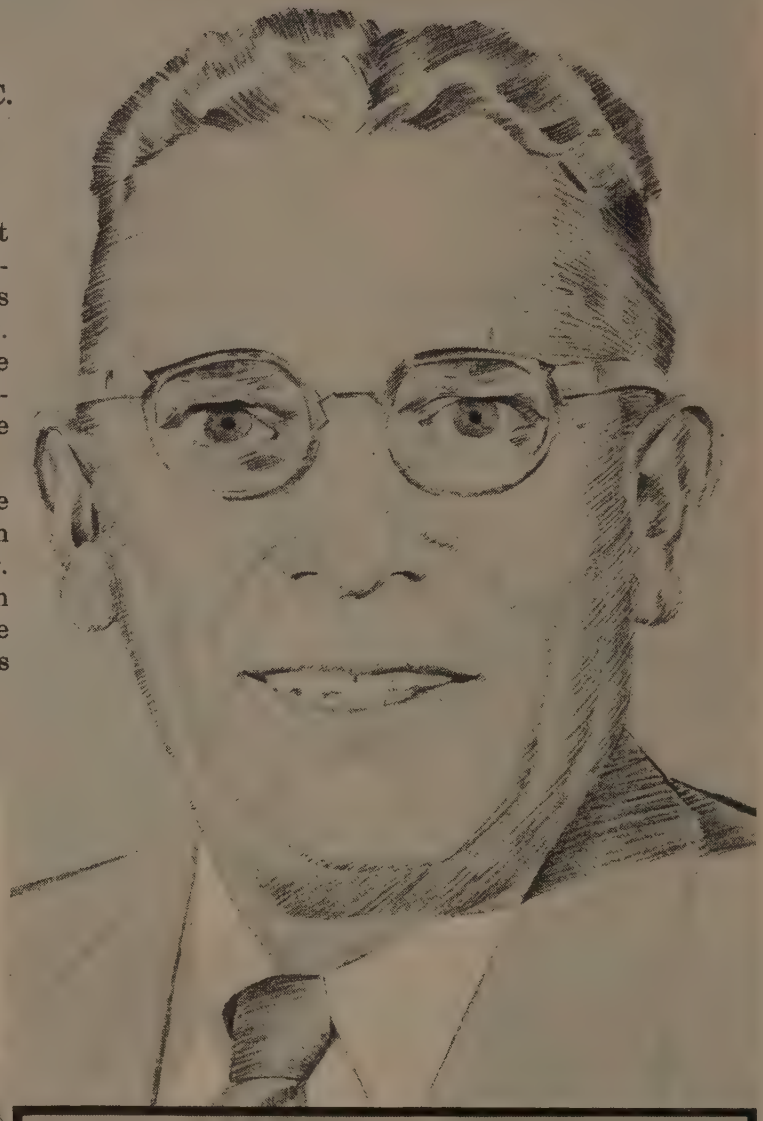
says

ALDEN C. DUDLEY, A.H.C.

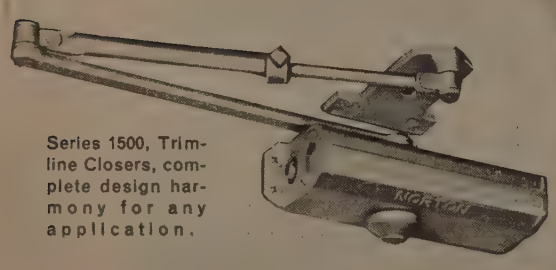
DUDLEY HARDWARE COMPANY

"For the nation's first automated post office I recommended Norton's new Trimline Closer because the Trimline offers complete design harmony and flexibility. On an outstanding building like this, the door closers had to be styled to compliment the building's decor and be flexible enough to be installed in all locations."

This first automated U.S. Post Office is housed in a building as progressive in its architecture as it is in purpose. Mr. Dudley specified the new Trimline from Norton's complete line of door closers. He chose an outstanding door closer for this outstanding project.



Your builder's hardware man is a good man to know. He makes important contributions to the building industry. This specialist will assure you that your hardware will be completely compatible with your building's design and function.



Series 1500, Trimline Closers, complete design harmony for any application.

U. S. Post Office, Providence, Rhode Island
Operated by: Intelex Systems, Inc.
Architect: Charles A. Maguire & Assoc., Providence, Rhode Island
Contractor: Gilbane Building Company, Providence, Rhode Island
Distributor: Dudley Hardware Co., Providence, Rhode Island

NORTON®
DOOR CLOSERS
372 Meyer Rd., Bensenville, Ill.

1017

PAUL W. LITCHFIELD JUNIOR HIGH
Plate No. 1095
Akron, Ohio

Architects: TUCHMAN & CANUTE
Akron, Ohio

Mural Artists: LUKE & ROLAND LIETZKE
Akron, Ohio

Tile Contractor: J. F. BERTOLINI CO.
Akron, Ohio

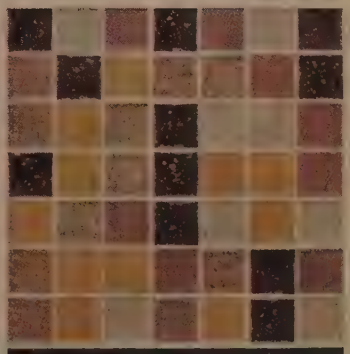
Color and design opportunities are unlimited with ROMANY•SPARTAN Ceramic Tile

Here's more evidence of the design potential of ceramic tile for exterior use. Architects Tuchman & Canute created this striking effect by combining these imaginative murals and custom buckshot patterns of low-cost Romany•Spartan ceramic mosaics with brick. Romany•Spartan tile is certified frost-proof—stays fresh and bright for a building lifetime with little or no care. Choose Romany•Spartan for interior walls, too. Back-mounted Level-Set® 4¼" glazed tile installs faster and its extremely thin joint adds extra beauty. There's a Romany•Spartan distributor or representative near you to provide information, samples or design help. United States Ceramic Tile Co., Department PC-20, Canton 2, Ohio.

MEMBER

UNITED STATES CERAMIC TILE COMPANY

Plate No. 1096



ROMANY

SPARTAN®

CERAMIC TILE

Plate No. 1094

Lobby walls are of Romany•Spartan ceramic mosaics in a custom pattern.

Design flexibility in ceramic tile

Operating room walls are of Romany•Spartan glazed tile, each individually designed and color styled.

Plate No. 1093

FRANK CUNEO MEMORIAL HOSPITAL, Chicago, Ill.
Architects: BELLI & BELLI CO. INC., Chicago, Ill.
Tile Contractor: McWAYNE COMPANY, Chicago, Ill.

Whether your decorative theme calls for standard patterns or custom designs in ceramic tile, you can depend on Romany•Spartan to meet your specific needs. In glazed wall tile there's a full range of sizes, shapes, finishes and trim with the newest, freshest colors and patterns. A broad range of ceramic mosaics is available, too, both glazed and unglazed. Choose solid colors, standard Buckshot® patterns, or mix them to suit yourself in patterns most pleasing to you. If it's ceramic tile, Romany•Spartan can fill your exact needs. Both 4¼″ wall tile and all ceramic mosaics are available with the famous Quickset® back mounting for speedy installation. Want design help, information or a quotation? Call your nearby Romany•Spartan sales representative, or write United States Ceramic Tile Company, Department PC-21, Canton 2, Ohio.

ROMANY SPARTAN

MEMBER

UNITED STATES CERAMIC TILE COMPANY

CERAMIC TILE

START HERE to give your clients better

INDOOR *Climate Control*

WOOD WINDOW UNITS

precision-assembled at the factory with

MONARCH METAL WEATHERSTRIP

While the problem of radiation at windows and doors is best solved through the superior insulating properties of wood units, the other factors of infiltration and exfiltration involved in the control of indoor climate can be adequately met only by weatherstrip properly designed and applied.

However, the many brands of weatherstripped wood window and door assemblies now available vary widely as satisfactory retardants against dirt, wind and water seepage. To overcome this difficulty and to provide uniformly superior protection, Monarch collaborates with the leading millwork manufacturers in designing weatherstrip specifically for their window and door units. These completely integrated assemblies are the answer to better indoor climate control.

Specify that "wood window and exterior door units shall be assembled and equipped at the factory with Monarch metal weatherstrip." At the same time you will be specifying the finest quality the industry produces.

Monarch produces only weatherstrip for leading window and door manufacturers and jobbers.

MONARCH

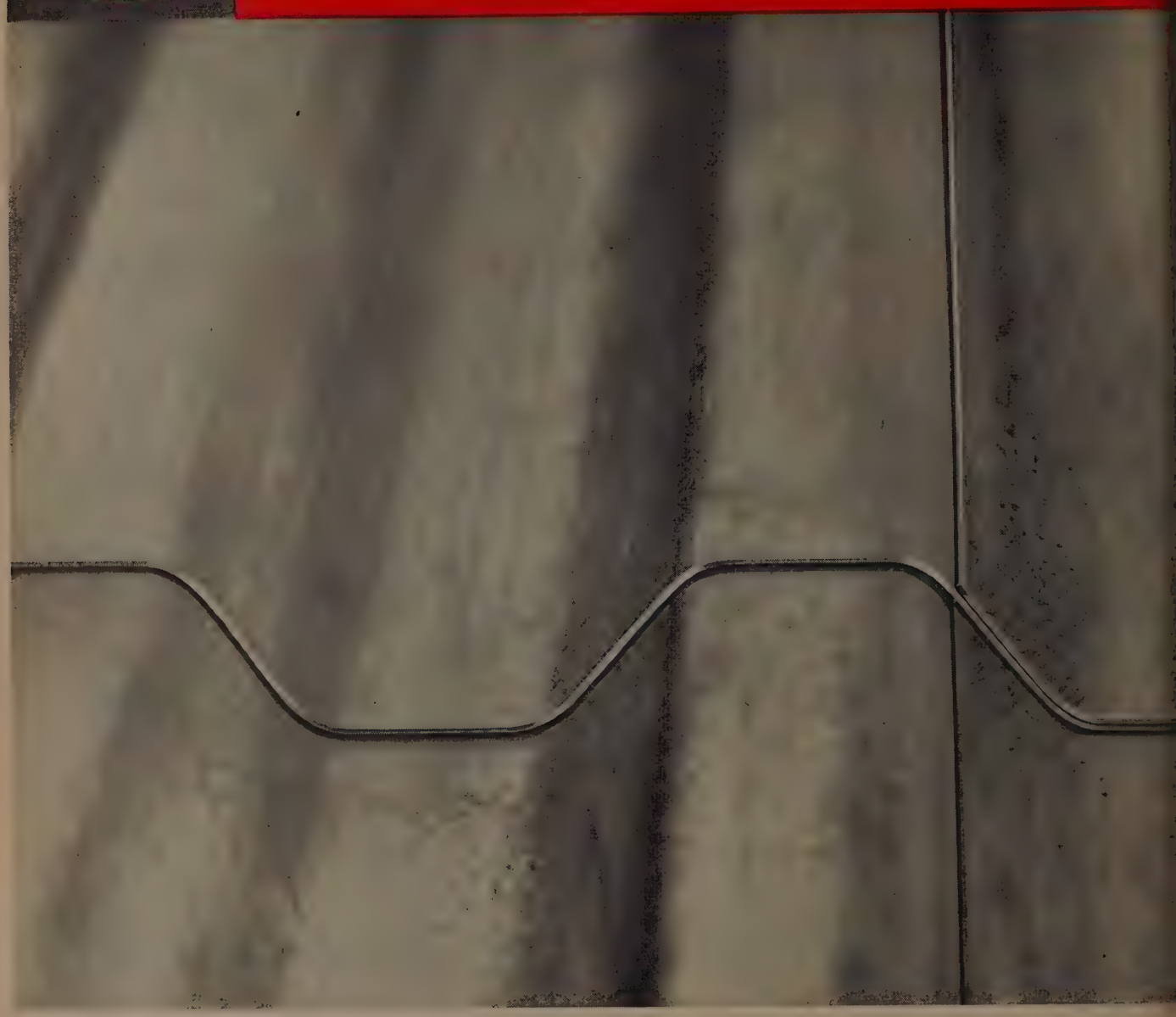
World's Largest Exclusive Weatherstrip Manufacturer

METAL WEATHERSTRIP CORPORATION

6333 Etzel Avenue • St. Louis 33, Missouri

Wheeling

TENSILFORM BY WHEELING



SPEED CONSTRUCTION OF SCHOOL FLOORS AND ROOFS WIT

Now! Here's a stronger, easier-to-use permanent steel base for concrete floors and roofs...and for *both* conventional and light-aggregate concrete. It's *all-new* Tensilform by Wheeling!

A full twenty-five per cent stronger, new Tensilform permits fewer, lighter floor and roof supports ...provides excellent lateral stability for all types of structures.

What's more, Tensilform is produced by Wheeling Corrugating Company, long experienced in t fabrication of corrugated steel sheets and oth sheet steel products. So it always has close-fittin corrugations . . . always lays quickly.

You gain many other advantages as well by spec fying strong, dependable Wheeling Tensilform a permanent base for concrete floors and roof These include:

• Earlier occupancy because shoring is eliminat

WHEELING CORRUGATING COMPAN

Warehouses: *Boston, Buffalo, Chicago, Columbus, Detroit, Kansas City, Louisville, Minneapolis, New Orleans, New Yo*

THIS NEW, MORE UNIFORM SHAPE!

...and Tensilform can be installed in any weather.
- Excellent "U" factors with low initial cost.
- Lower fire as well as extended coverage rates.
- Cleaner construction because precision-formed Wheeling Tensilform cuts cement seepage.

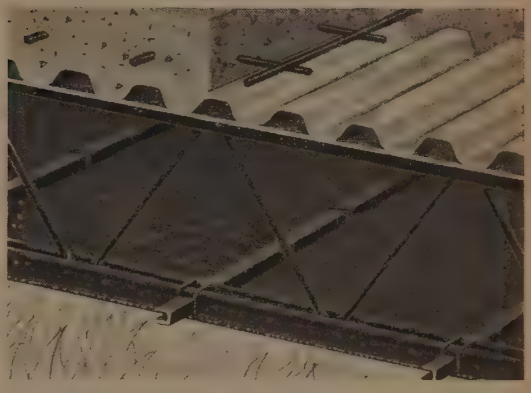
Get the complete story on Tensilform for floor and roof slabs from your Sweet's File. Or write to Wheeling Corrugating Company, Wheeling, West Virginia.

Steel

IT'S WHEELING STEEL!

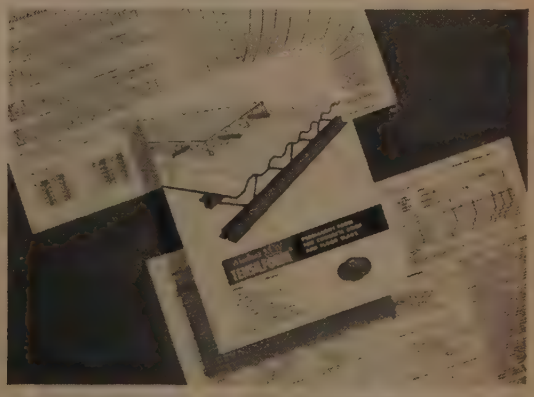
Philadelphia, Richmond, St. Louis. Sales Offices: *Atlanta, Houston.*

EXCELLENT "U" FACTORS AT LOW INITIAL COST! Save your client money by (1) lowering construction costs, and (2) minimizing heating and cooling costs throughout building's life.



SUPERIOR FIRE RESISTANCE! Cuts annual costs because this superior fire resistance is reflected in reduced fire and extended coverage rating.

IMMEDIATE, SAFE WORKING DECK! As soon as it's laid, Tensilform speeds construction by providing a sturdy, safe working deck that's used by all crafts.



FULL INFORMATION IN YOUR SWEET'S FILE! Our catalog is in Sweet's. It has complete load tables, deflection charts; in fact, everything you'll need to specify Wheeling Tensilform. (Extra copies upon request!)

Honeywell announces a new smoke detection system that adds life-saving minutes to crucial evacuation time

New Smoke Detector "sees" the first sign of a fire—assuring the best possible protection of lives and property!

In any fire—but particularly in a school fire—there is no time to spare for human error! In minutes a spark can grow into a blazing inferno. Long before that, smoke will have made the atmosphere deadly. With so many young lives at stake, it is important that fire be detected at the earliest possible moment.

Now Honeywell has developed a new smoke detection system that *sees* the first sign of a fire—smoke—first. It saves valuable minutes. And these minutes saved can mean lives and property saved.

Compare, and you'll find Honeywell's new Smoke Sentry the fastest detection system available. It stands guard over large, open areas with a constant beam of light. When smoke interrupts this beam, an alarm sounds instantly. Even the tiniest wisp of smoke from a hidden fire will be *seen* and will trigger the alarm mechanism.

Never before, a smoke detector that safeguards an area the size of a basketball court—round-the-clock!

A single Smoke Sentry projector-sensor set will watch over an area up to 160 feet long and 30 feet wide. The projector and sensor can be set as close as 15 feet apart to guard such areas as classrooms, offices and electrical or mechanical equipment rooms. In large installations, an annunciator panel is used to pinpoint the area of a building in which a fire has started. One panel may be used for as many as five zones, and each zone may contain one or more projector-sensor sets.

It's the latest addition to Honeywell's complete fire alarm system for every building, every situation!

The Smoke Sentry can be used in addition to Honeywell's Fire Detection and Alarm System for total protection in critical areas. The combined systems offer four-way safety: fast automatic detection—manual stations—local alarm—and automatic calling of the fire department. For further information about the new Smoke Sentry, call your local Honeywell office. Or write Honeywell, Minneapolis 8, Minnesota. In Canada, write Honeywell Controls, Limited, Toronto 17, Ontario.

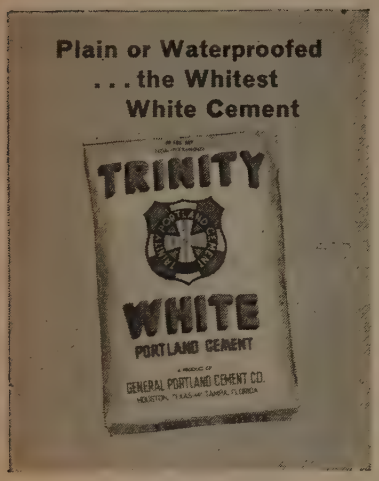
NEW RAY-OF-LIGHT SMOKE DETECTOR
PROVIDES EXTRA LIFE-SAVING MINUTES

HONEYWELL INTERNATIONAL
Sales and service offices in all principal cities of the world.
Manufacturing in the United States, United Kingdom,
Canada, Netherlands, Germany, France, Japan.

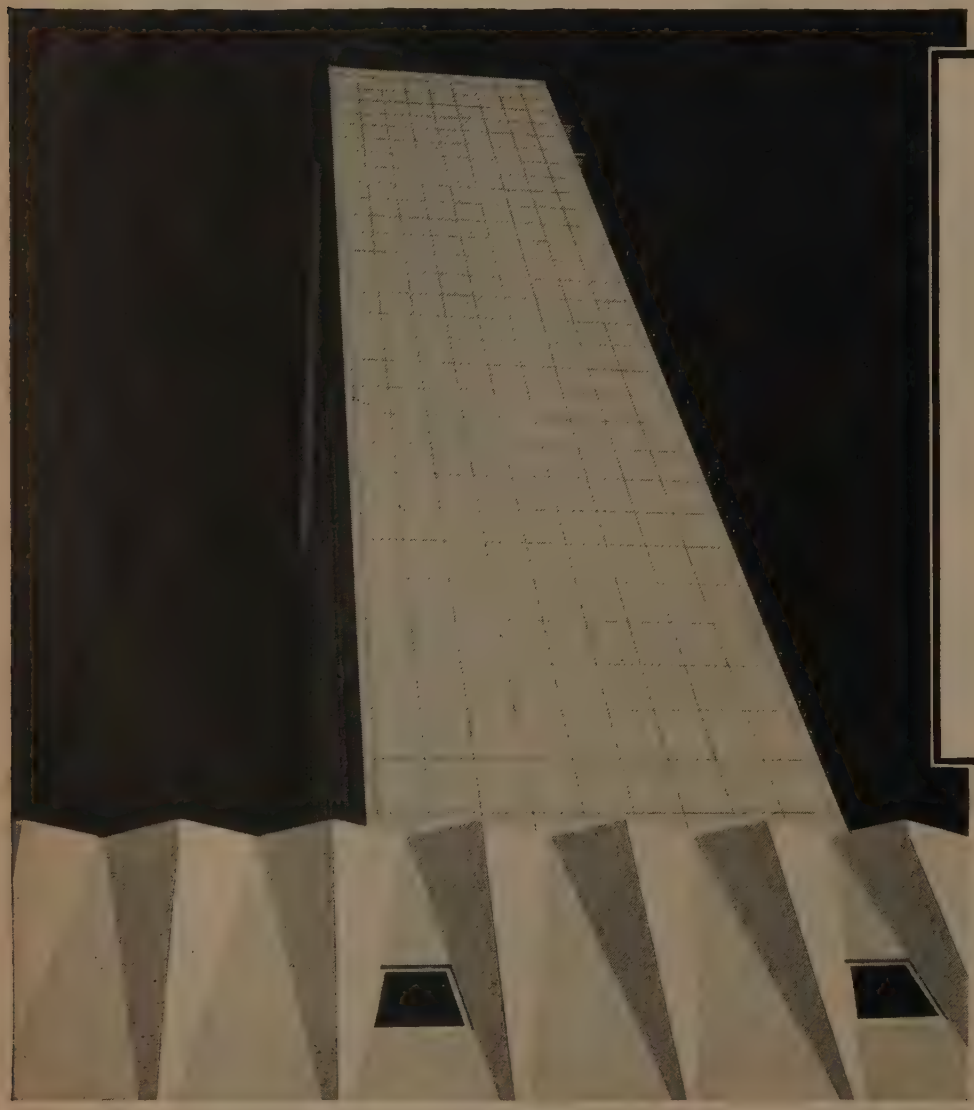
Honeywell

H HONEYWELL *First in Control* SINCE 1885

Precast Concrete Curtain Wall



Precast concrete curtain wall construction provides excellent appearance and low maintenance. It offers a wide choice of colors and textures. Up to 85% of the panel surface may be exposed aggregate. Other features include the unusual rapidity with which a building can be enclosed . . . panels up to 100 sq. ft. or larger put "scale" and a feeling of mass into the building . . . precast concrete permits 3-dimensional surfaces or sculpturing. The precast concrete curtain wall is more waterproof because with large panels and with corner panels cast with a return, there are fewer joints.



Other Notable Structures Using Precast Concrete Curtain Walls

McCormick Place, Chicago
Shaw & Metz Associates,
Architects

Courthouse,
Montgomery, Alabama
Pearson, Title & Narrows
Architects

Skelly Oil Building, Tulsa
Black & West, *Architects*

International Building,
San Francisco
Anshen & Allen, *Architects*

General Engineering Building
University of Washington,
Seattle
Harmon, Pray & Detrich,
Architects

CREDITS: *Pictured here is the Southland Life Insurance Company's development in downtown Dallas, covering two and one-half acres and costing approximately $35,000,000. Concrete panels made with Trinity White and white quartz by Wailes Precast Concrete Corp., Dallas & Los Angeles. Owner, The Southland Life Insurance Company; Architects & Engineers, Welton Becket, FAIA and Associates, Los Angeles & Dallas; Consulting Architect, Mark Lemmon, AIA, Dallas; Structural Engineers, Murray Erick Associates, Los Angeles; General Contractor, J. W. Bateson, Co., Inc., Dallas.*

TRINITY WHITE DEPARTMENT

General Portland Cement

Terrazzo Floors

Trinity White is especially adapted to the requirements of terrazzo work. The "whitest white" portland cement combined with fine white marble will produce terrazzo of finest quality and appearance. Trinity White means a truer color in the matrix whether its color is required to blend with or be in contrast to the color of the marble. Terrazzo floors offer no limitation to decorative treatment. They are economical to maintain.

Other Uses of Trinity White

STUCCO Where obtainable, a factory-made stucco finish is preferable. Many leading stucco-mix manufacturers use Trinity White. It gives truer, purer colors.

PAINT Portland cement paint provides a decorative, waterproof coating completely compatible with concrete and other masonry surfaces.

POOLS Trinity White, when mixed with white aggregates as plaster, or, when used in portland cement paint provides the ideal finish for a swimming pool. Several manufacturers specialize in these products.

MORTAR AND GROUT For setting all concrete and ceramic masonry units . . . wall and floor tile . . . cast stone and architectural concrete units . . . natural stones.

CAST STONE Sills, lintles, trim, decorative facings, etc.

LIGHTING The high light reflection of Trinity White contributes to better light, both natural and artificial.

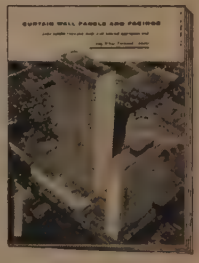
SAFETY USES Trinity White's light reflection is useful in walks, steps, traffic uses such as light reflecting curbs, dividers, barriers, markers, etc.

MASONRY UNITS Structural units and ornamental uses, including decorative screens, fences, etc.

Also: Roof Tile, Floor Tile, Solar Screens, Slump Brick, Laundry Trays, Cold Glaze Finishes, Steps, Garden Furniture.

Useful Booklets— Free on request

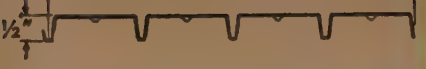
Curtain Wall Panels and Facings. Covers important curtain wall installations in various parts of the U. S. Shows details of installation of panels at Southland Center, Dallas; methods of anchoring; condensed specifications . . . sent on request.



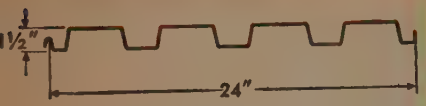
Full Color Reproduction of 24 of the most popular color combinations for terrazzo floors made by direct photography from samples furnished by the National Terrazzo and Mosaic Association, Inc.

Company

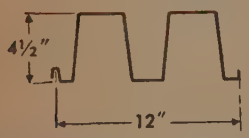
CHICAGO • CHATTANOOGA • DALLAS • FORT WORTH • FREDONIA, KANSAS
HOUSTON • JACKSON, MICHIGAN • TAMPA • MIAMI • LOS ANGELES



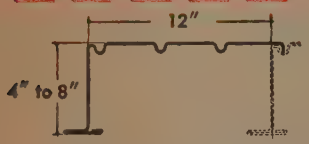
A-DECK — For purlin spacings not exceeding 8'4". Narrow ribs provide deck surface that supports the thinnest or softest types of insulation.



B-DECK—For spans to 10'0". Wide rib distributes metal for greater structural efficiency—gives higher section properties per pound of steel — well suited for use as side wall panels.



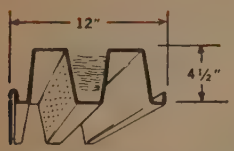
C-DECK—Carries normal roof loads over spans up to 24'0". Used extensively in canopies.



T-STEEL — New! Galvanized only. For clear spans to 32'0". Adaptable to acoustical and flush, luminous ceiling treatments. Provides superior diaphragm to transmit seismic and wind loads.

H-DECK — New! For simple spans from 10'0" to 20'0"— 3 and 4½" depths. Especially practical to cover walkways in shopping centers, schools, other installations.

B-ACOUSTIDECK — Two-in-one panel combines steel roof deck with acoustical ceiling having Noise-Reduction Coefficient of .70. Used for spans to 10'0".



C-ACOUSTIDECK — Offers same Noise-Reduction Coefficient as B-Acoustideck. Can be used for spans to 24'0"

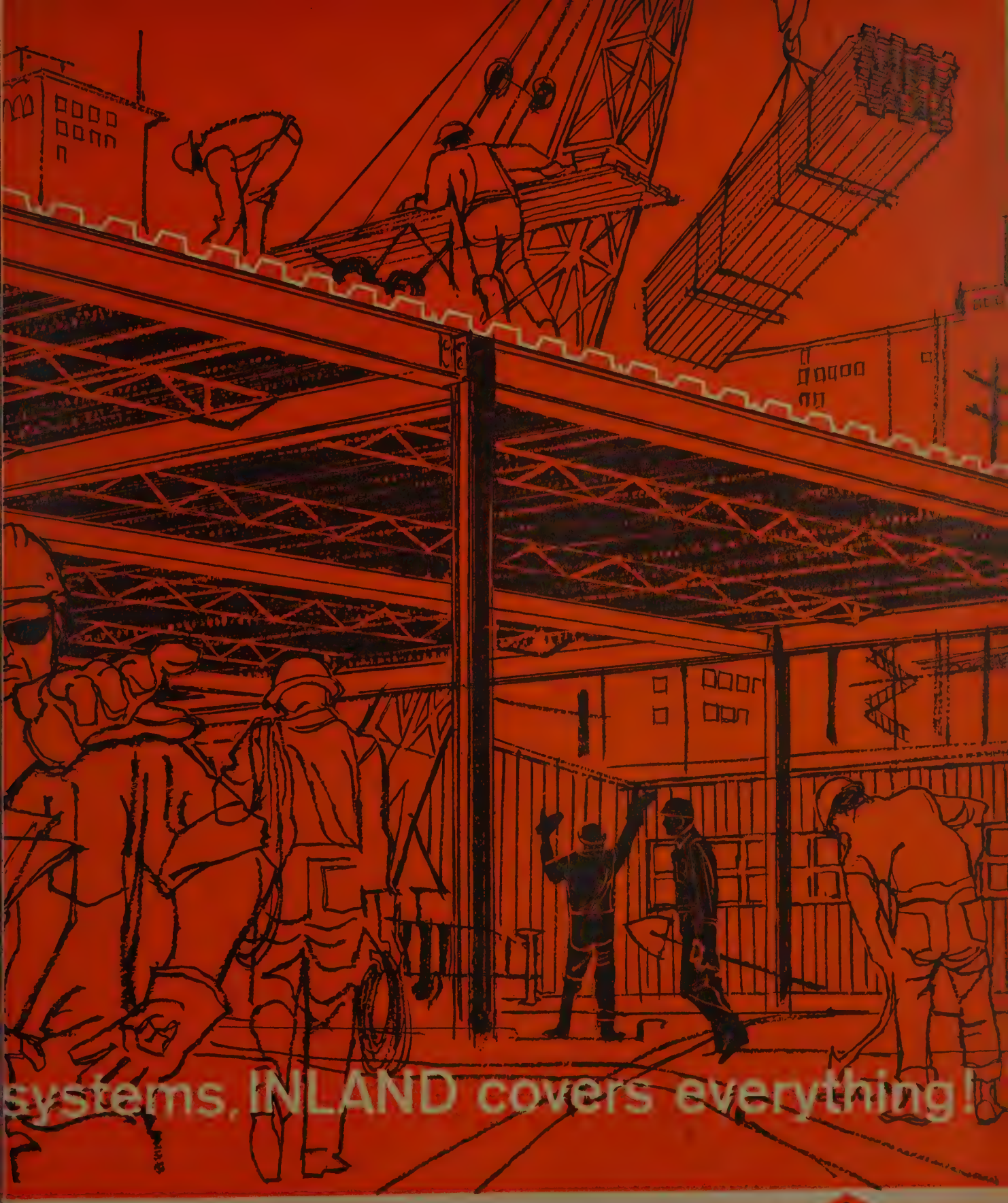
RIBFORM—High tensile steel form for concrete slabs over spans up to 8'0". Three types: Standard, Heavy-Duty, Super-Duty (shown). Galvanized.

When it comes to roof

Whether your design calls for a dry insulation board roof or for wet-fill, there's an Inland roof system for the job — by the makers of Milcor steel building products, famous for years for highest quality.

Inland steel deck is lightweight — weighs less than half as much as poured-in-place or pre-cast construction. You can space joists wider than otherwise and use lighter framework, to save both time and money.

Panels are easy to handle and weld in place — in any weather that a man can work. They don't need warmth for setting, nor time for curing. They don't



absorb water, nor lose their strength when wet — the job stays on schedule.

Types A, B, C, and H decks have the additional advantage of a Bonderized, baked-enamel prime finish that resists on-the-job damage. One field coat of paint on these Inland decks usually does the job of two coats on ordinary decks.

Write for catalogs 240, 241, and 245 — or see Sweet's sections 2c/Inl, 11a/In, and 2a/In for full information on Inland steel roof deck and permanent centering. If you have an unusual problem, you can draw upon their diversified experience by consulting Inland's Engineers.

member of the INLAND steel family

ENGINEERED PRODUCTS DIVISION

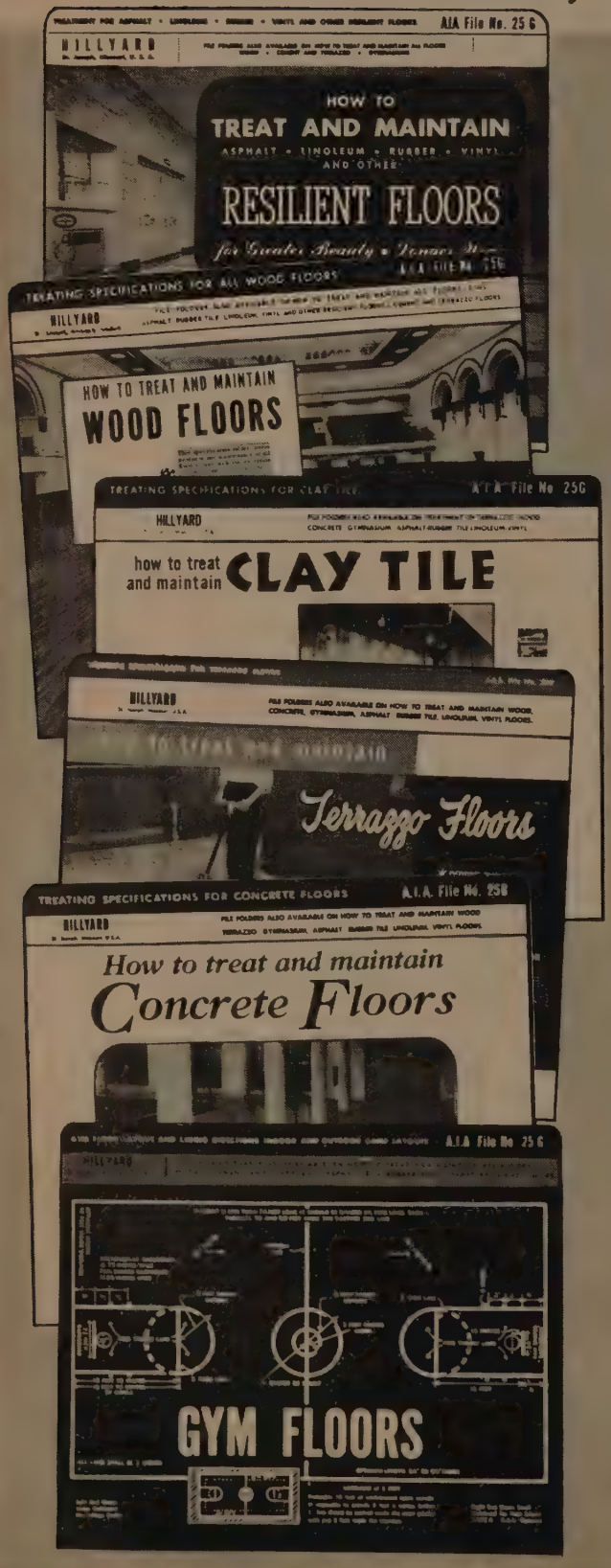
INLAND STEEL PRODUCTS COMPANY

Dept. A, 4031 West Burnham Street
Milwaukee 1, Wisconsin

bring your floor treatment files

up to date with these

NEW, REVISED, INDEXED



Hillyard

A.I.A. Floor Treatment Files

File sized and A.I.A. numbered, these Hillyard floor treatment files, for every type of flooring in wide use today, are convenient and easy to use. Each contains both short architectural specifications and step-by-step long specifications for the contractor and for follow up maintenance procedures by the custodian. All procedure steps are fully explained and tools and materials are defined—fully illustrated, too.

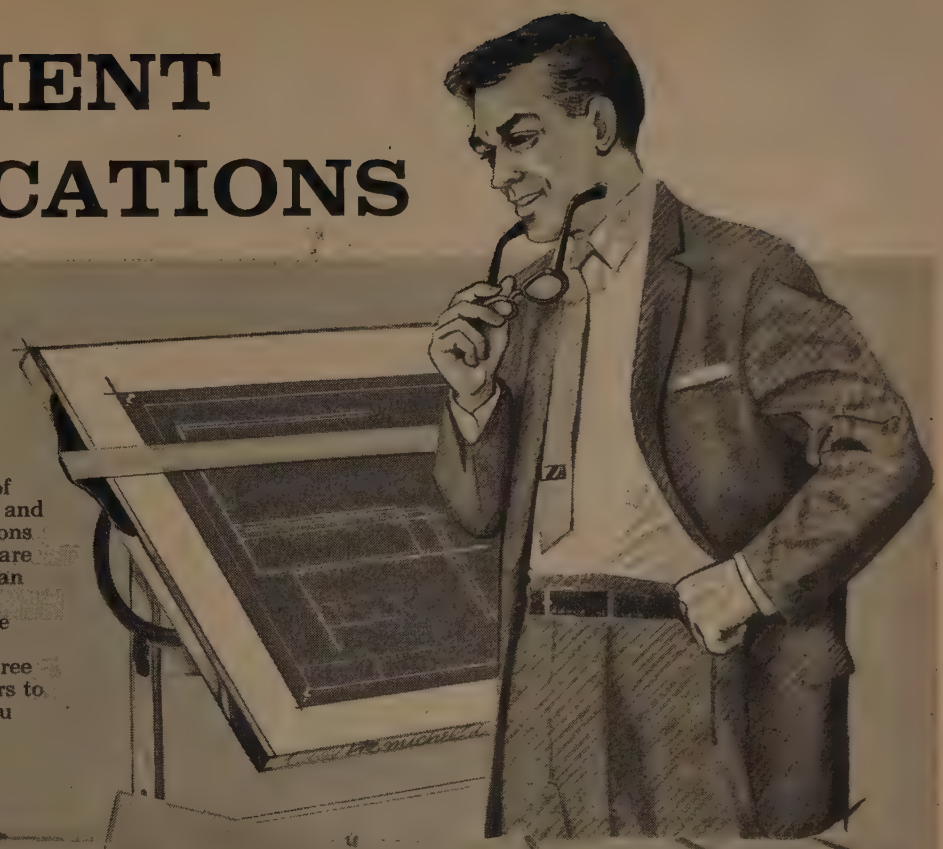
For further and more complete understanding, the "importance of proper treatment" explains why proper sealing, cleaning and finishing are necessary to provide proper surface protection.

Hillyard products recommended for proper treatment are also described in these floor treatment files.

The back page of each of these files contains a listing of Hillyard "Maintaineers" throughout the United States. There is one near you who is thoroughly trained to provide technical advice in the planning for proper treatment and finishing of any floor. He is also available for *free* "job captain" service wherever you may require him.

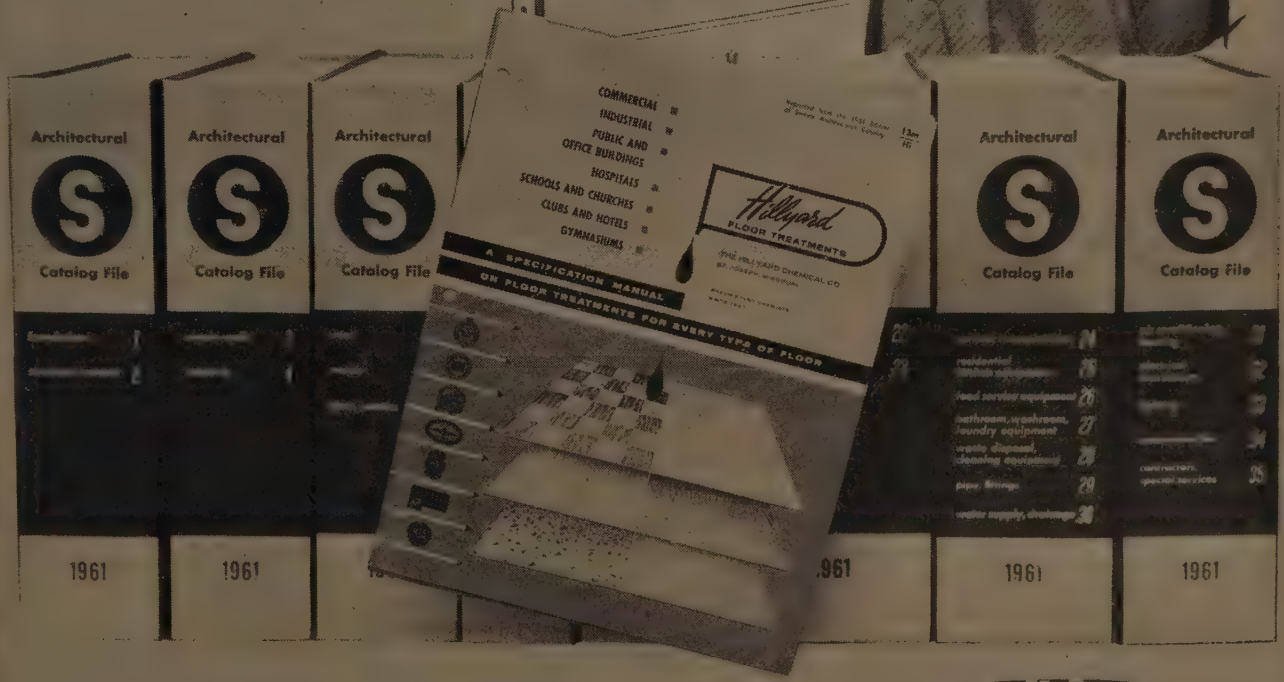
"On Your Staff, Not Your Payroll"
Since 1907

FLOOR TREATMENT SPECIFICATIONS



Hillyard pre-filed catalog in Sweets' Architectural File

Always at your fingertips in the section 13m/Hi. This 8-page catalog is conveniently indexed by types of floors and will furnish accurate and precise architectural specifications for finishing any floor that you are planning. This file also carries an up-to-date listing of Hillyard "Maintaineers" near you. Write direct or call the Hillyard "Maintaineer" nearest you for free technical assistance. The answers to floor problems are as near to you as your Hillyard catalog in Sweets' Architectural File.



ON TERRAZZO · WOOD · ASPHALT
RUBBER · VINYL · CONCRETE · GYMNASIUM

You'll *Finish* Ahead with

HILLYARD

BRANCHES AND WAREHOUSE STOCKS IN PRINCIPAL CITIES

San José, Calif. St. Joseph, Mo. Passaic, N. J.

PRODUCERS COUNCIL

IN SWEET'S ARCHITECTURAL FILE

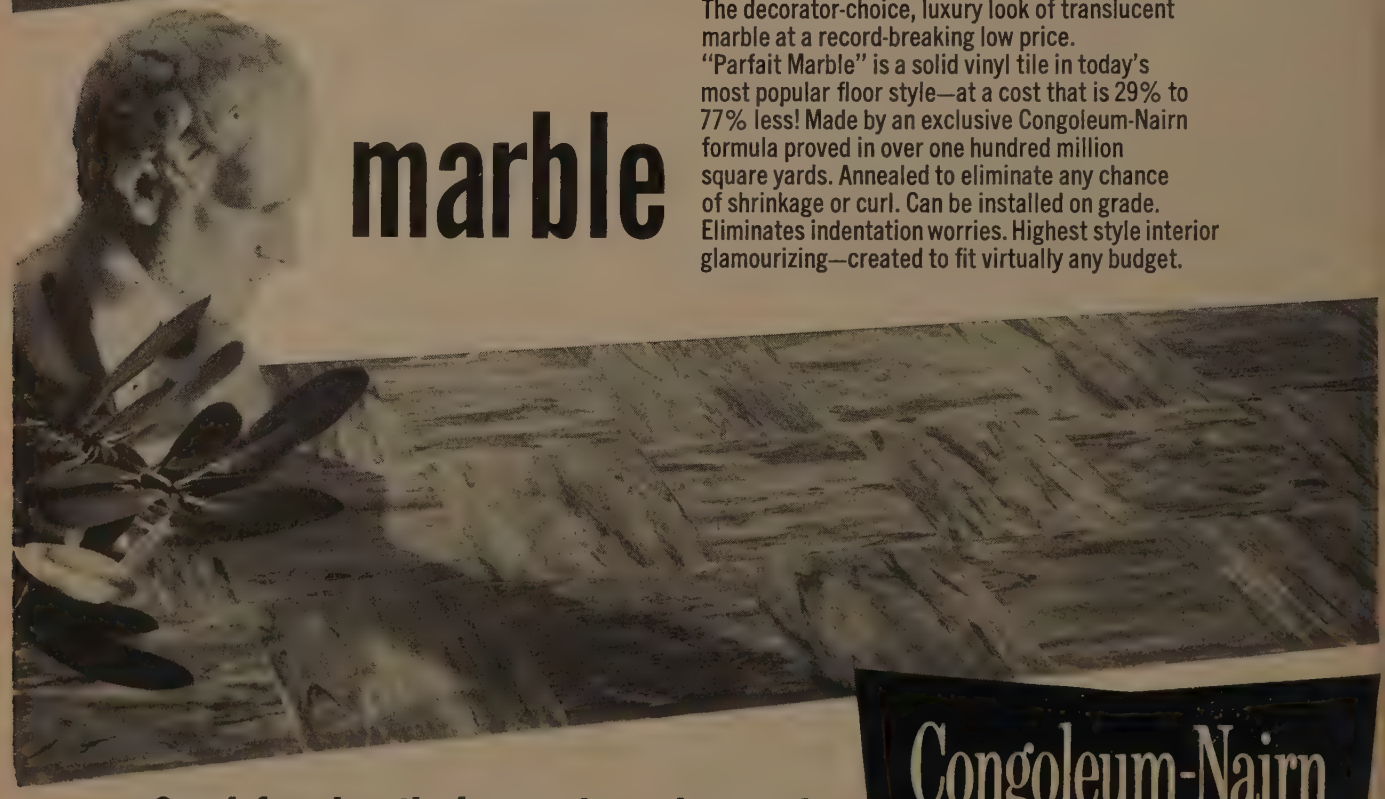
THE LOOK OF

NATURE

...the news today in ***low-cost vinyl floors***

wood

Man's oldest, friendliest building material reproduced in man's newest, finest decorative creation: "Embossed Woodhues." Solid Vinyl Tiles. Revolutionary? A really startling first: not just the color, tone and look of wood blocks—the actual **feel.** The wood grain is embossed on the surface! Decorative? There's almost no limit to the parquet or wood mosaic effects possible. Practical? **All** the stain defying, easy cleaning, long wearing wonder of solid vinyl. Economy? These amazing tiles cost in the neighborhood of 20¢ each!

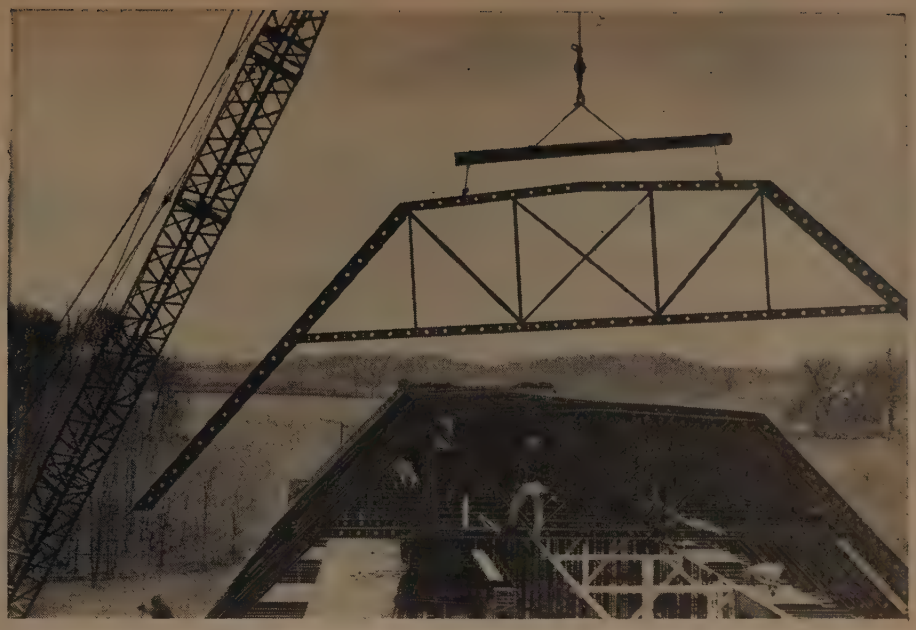


marble

The decorator-choice, luxury look of translucent marble at a record-breaking low price. "Parfait Marble" is a solid vinyl tile in today's most popular floor style—at a cost that is 29% to 77% less! Made by an exclusive Congoleum-Nairn formula proved in over one hundred million square yards. Annealed to eliminate any chance of shrinkage or curl. Can be installed on grade. Eliminates indentation worries. Highest style interior glamourizing—created to fit virtually any budget.

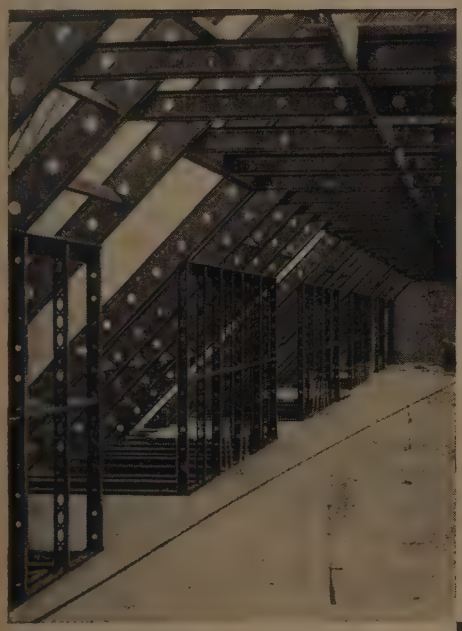
Send for details by mailing the card at the back of this book.

Congoleum-Nairn
FINE FLOORS



After fabrication, roof trusses were raised into position by a mobile crane and securely welded in place in a matter of minutes. Smaller panels were light enough to be carried and erected without handling equipment.

Architect tells why he selected Penmetal structural framing for Methodist Country House



According to the architectural firm of Dollar, Bonner, Blake and Manning, "The reasons for our choice were numerous, but the most important were that the light steel would provide a lightweight incombustible frame and that the nailable feature of the members would provide a simple means of attaching other materials.

"We were also convinced that light-steel framing was no more expensive than other types of construction, and that proper panelization would result in a rapid rate of progress in erection. The latter two points were subsequently proven to be correct by the results achieved in this project."

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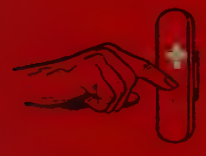

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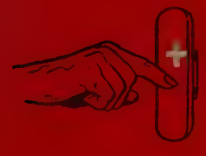

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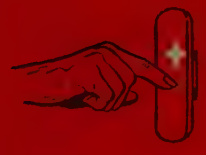

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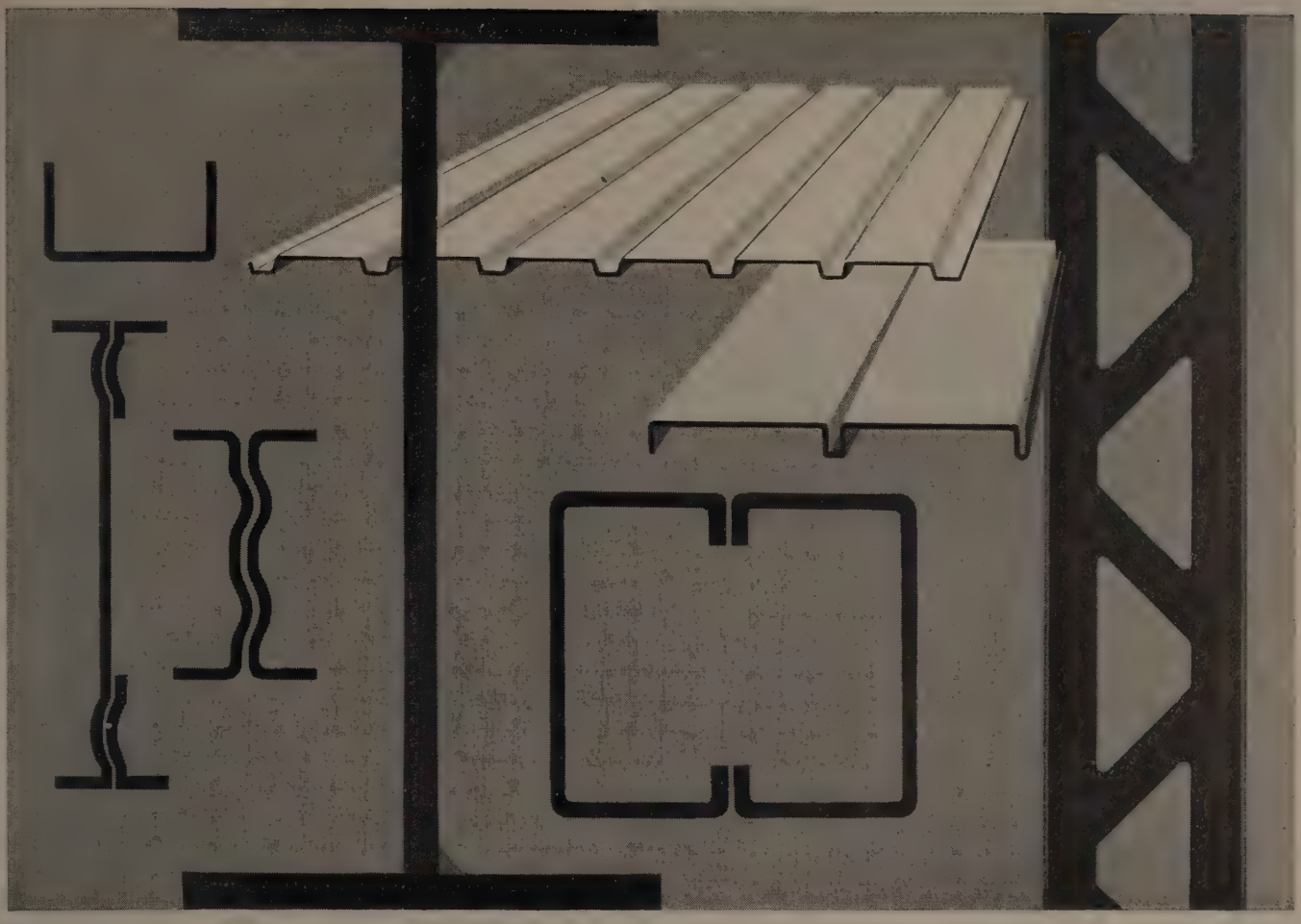

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Stran-Steel lightweight components—joists, studs and channels, columns, beams, colored curtain wall and ribbed decking—are engineered so that each part fits perfectly with every other part. There is little or no special fabricating required. Buildings go up fast—with less bridging, better lateral beam support and little welding!

Stran-Steel's distinctive nailing groove makes it possible to apply collateral materials directly with ordinary nails. Wide flange beams, in a variety of sizes, are especially adaptable to multiple-floor projects. They save space and materials, and eliminate beam boxing and false ceilings.

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Stran-Steel's Basic Architectural Products

STRAN-STEEL IS A DIVISION OF **NATIONAL STEEL CORPORATION**

Jacoby

From Armstrong: a giant step in fire-retardant ceilings

Now, for libraries: two types of Acoustical Fire Guard—12″ x 12″ tiles and new lay-in units

The main ceiling of the library on the left has the new Acoustical Fire Guard *lay-in* ceiling. The first floor ceiling, which you see just below the mezzanine, is of Acoustical Fire Guard *tile*.

This was the first time-design-rated acoustical tile. Since it was first introduced by Armstrong two years ago, millions of feet have been installed.

The new lay-in system is another great advance in fire-retardant ceilings. Here's why.

Unique New Suspension System

Because of a new type of suspension system, the Armstrong Acoustical Fire Guard lay-in ceiling combines the advantages of an exposed grid system—economy and fast installation—with those of a time-design-rated acoustical ceiling. Here's how the lay-in units work with the specially designed Fire Guard Grid Suspension System* to protect the structural components of a building.

Ceiling Withstands 2000 Degrees

The lay-in unit — because of its composition — can withstand exposure to flames and 2,000-degree heat. The new grid system, designed exclusively to support these units, will resist this same intense heat by allowing its members to expand, thus holding the lay-in units firmly in place. This suspension system is the first to be combined with a lay-in ceiling unit to offer rated fire protection. Both the lay-in unit and the grid system carry the U.L. label.

Underwriters' Laboratories, Inc., has given the Fire Guard lay-in ceiling system a beam protection rating of three hours. Floor-ceiling assemblies combining it with bar joist and slab, as well as with beam and steel floor construction, earned two-hour ratings. In areas which require more protection, Acoustical Fire Guard *tile* can be used. It has U.L. ratings of up to *four* hours.

Cost Low, Savings High

In most cases, the new lay-in ceiling will cost even less than ordinary plaster ceilings on metal lath. And like tile, the new ceiling can save builders up to *two months'* construction time. This means that a building like this library may open two months earlier.

A Choice of Design

The Acoustical Fire Guard lay-in ceiling is now available in both the Classic and Fissured designs. There are two nominal sizes: 24″ x 24″ x 5/8″ and 24″ x 48″ x 5/8″.

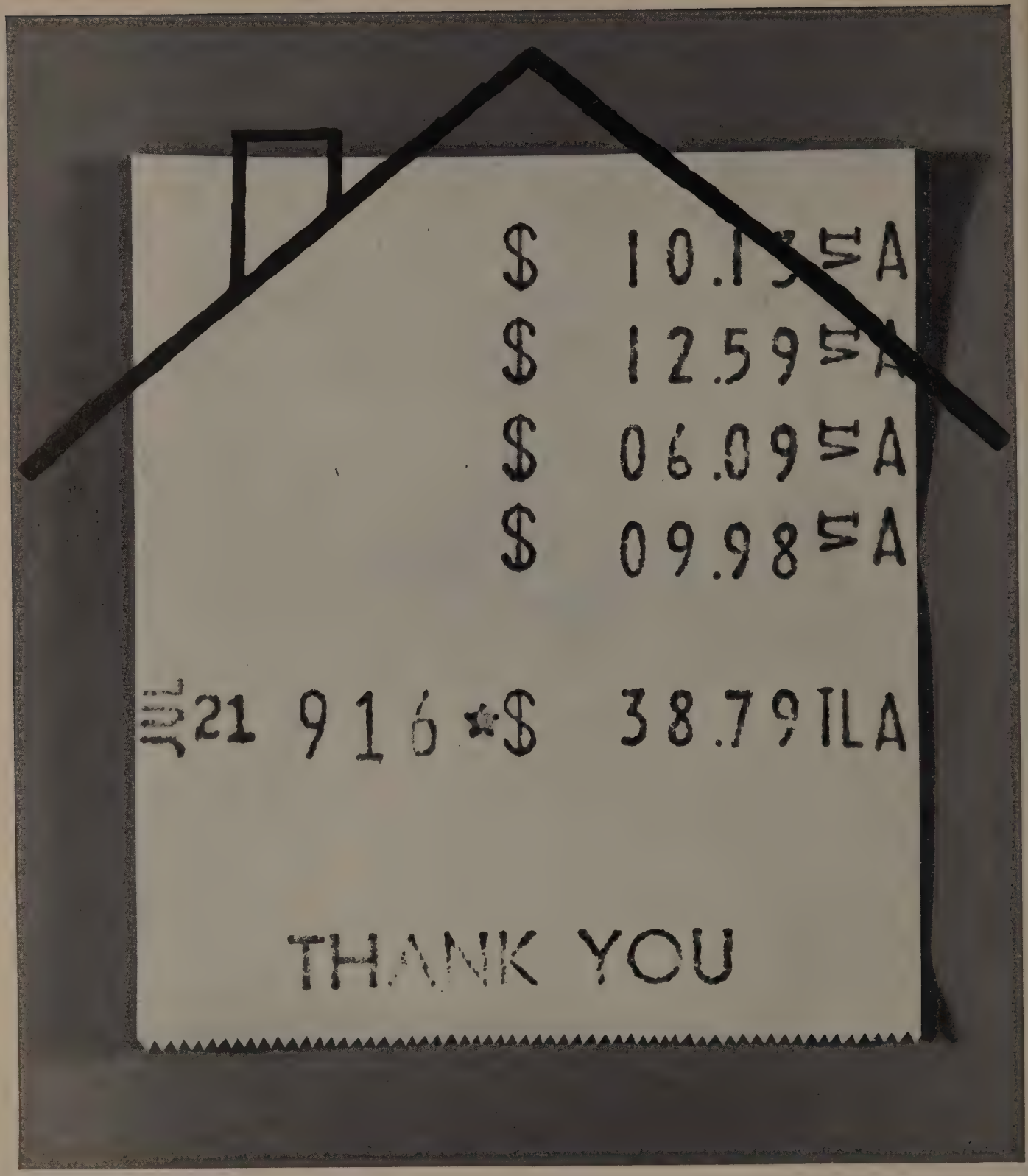
For more information about either Acoustical Fire Guard tile or lay-in units, call your Armstrong Acoustical Contractor (he's in the Yellow Pages under "Acoustical Ceilings") or your nearest Armstrong District Office. Or write to Armstrong Cork Company, 4203 West End Avenue, Lancaster, Penna.

* Patent pending

Armstrong ACOUSTICAL CEILINGS

First in fire-retardant acoustical ceilings

Architectural design and rendering by Helmut Jacoby



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10,000 sq. ft.	Vinyl Asbestos Tile	@ 41¢ sq. ft. = $4100
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- Can be used anywhere indoors . . . even over concrete in contact with the earth, on or below grade, with the use of special adhesive.
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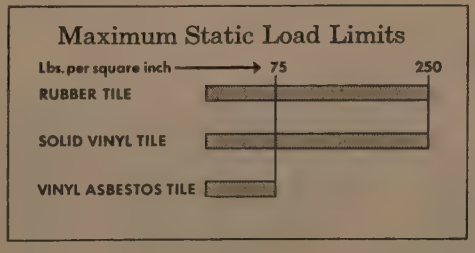
- Excellent resistance to indentation. (See chart below.)



Which tile for which installation? Kentile Architectural Representatives offer expert advice to professionals. Since Kentile makes all leading types of resilient tile, counsel is unbiased. Call your nearest Kentile sales office.

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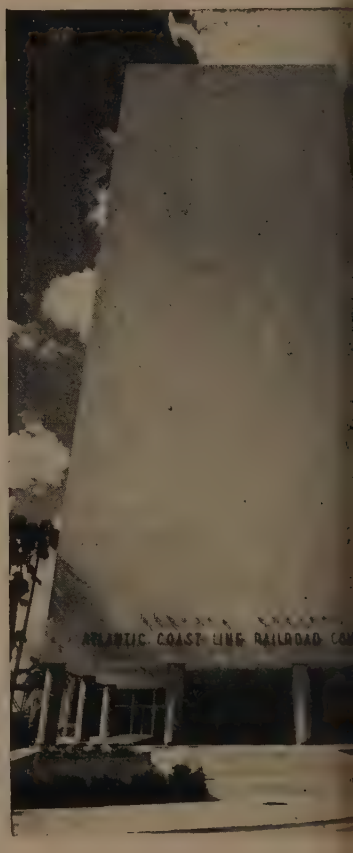

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Product Literature

for architects

TECHNICAL BULLETIN #95 presents a comprehensive list of literature published *for architects* by manufacturers of quality building products and by their associations . . . all members of the Producers' Council, Inc.

Select from these listings the information that will be most helpful to you. This listing is to provide for architects a reference source for specific information, not merely a check list by which to build a reference file. Select with care — and requests will be filled promptly and carefully.

To help you locate — and order — the information you need, the literature is presented in this order and with these helps:

1. *Building product classifications:* in alphabetical order and numbered to facilitate cross referencing of literature. (Pages 96 through 131)

2. *Manufacturers and associations with their literature:* in alphabetical order, with their literature, under designated classifications. Cross references show name and classification numbers under which other literature appears, *also* where other literature of the same member appears.

3. *Reference index of PC members* offering literature in Bulletin #95: names in alphabetical order, with the numbers of classifications in which literature appears. (Pages 94 and 95)

4. Literature of many companies may be requested on the postage paid cards at the back of this issue. Mark your selections and drop in a mail box for prompt service.

   For literature from companies with no request cards — please write *direct* to the company (full name and address in the Producers' Council Roster, pages (132–134). Give titles or numbers of the material you select and identify as "listed in P. C. BULLETIN #95."

KEEP this list . . . use it throughout the year as a reference source for literature on specific products, their uses and applications. Requests will be filled as long as literature is available.

Product Literature

for architects

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Armstrong Cork Company

COMPLETE GUIDE TO ARMSTRONG ACOUSTICAL CEILINGS. Sweet's Catalog Insert, 1961 Edition. Complete descriptions, technical data, illustrations and specifications on all Armstrong acoustical ceilings. Special section deals with problems of sound transmission. 36 pages. Color. 8½ × 11. AIA No. 39-B.

SPECIFICATIONS—ARMSTRONG ACOUSTICAL CEILINGS. Individual unabridged architect's specifications for material and installation. Sheets are perforated so that paragraphs which pertain to the particular job at hand can be removed and inserted in complete specification.

THE FIRST ACOUSTICAL CEILING TILE TO OFFER RATED FIRE PROTECTION. Information about Armstrong Acoustical Fire Guard, fire-retardant ceiling tile with UL time-design ratings. Shows actual case histories. Illustrated. 12 pages.

ARMSTRONG MINABOARD ACOUSTICAL CEILINGS. Complete descriptions and specifications for Armstrong Custom and Fissured Minaboard lay-in units. Includes sections on air flow resistance and resistance to sound transmission. 8 pages. 8½ × 11. AIA No. 39-B.

ARMSTRONG TRAVERTONE ACOUSTICAL CEILINGS. Complete information on Armstrong Travertone mineral-fiber acoustical ceilings. Includes specifications. 8 pages. 8½ × 11. AIA No. 39-B.

ARMSTRONG CUSHIONTONE ACOUSTICAL CEILINGS. Complete information and specifications for Armstrong Cushiontone wood-fiber ceilings. 8 pages. 8½ × 11. AIA No. 39-B.

Also see 55, 58, 77, 114, 116, 149.

The Celotex Corporation

SOUND CONDITIONING FOR SCHOOLS AND COLLEGES. A discussion of sound conditioning material for use in schools.

ACOUSTICAL MATERIALS SECTION, SWEET'S ARCHITECTURAL FILE. Description of Celotex acoustical products physical properties, architectural details, and technical data. 1961. 8½ × 11. 36 pages. AIA No. 39-B.

CELOTEX PRODUCTS FOR SOUND INSULATION. TECHNICAL NOTE No. 10x. Information covering construction of walls, floors, and ceilings, for reduction of sound transmission; complete with test data. 1961. 8½ × 11. 8 pages.

Also see 43, 74, 97, 113, 121.

Fenestra Inc.

Complete description and technical information on perforated metal roof deck ("Holorib," "D" Panel, "Fenacoustic" and "C" Panel).

Indiana Limestone Institute

ACOUSTIDECK Cat. 241.
ACCESS DOORS Cat. 210.

Also see 29, 53, 82, 85, 93, 114.

Inland Steel Products Company

ACCESS DOORS FOR ACOUSTICAL PLASTER AND ACOUSTICAL TILE INSTALLATIONS. Catalog No. 210. Milcor Steel Access Doors, for concealed installation within the plaster or tile layer, eliminate visual distraction and acoustical interruption of surface installed doors. 8½ × 11. 4 pages. AIA No. 16-i.

INLAND ACOUSTIDECK. CATALOG NO. 241. Describes Inland Acoustideck, a new steel panel that serves as both roof deck and exposed acoustical ceiling—yet saves almost half the cost of separate roof and ceiling construction. Includes load tables, a noise reduction chart, installation instructions, and suggested architect's specifications. 8½ × 11. 8 pages. AIA No. 39-B-1.

Johns-Manville Sales Corp.

JOHNS-MANVILLE SOUND CONTROL. Illustrations, description, construction details and acoustical data on various types of J-M acoustical ceiling units. 1961. 8½ × 11. 28 pages.

JOHNS-MANVILLE FIBRETONE ACOUSTICAL CEILING PANELS. Illustrations, description and installation details of these attractive, sound-absorbent fiberboard ceiling panels for residential and commercial use. 1960. 8½ × 11. 4 pages.

J-M PERMACOUSTIC SOUND CONTROL TILES. Product features, illustrations and installation methods for these decorative, fissured mineral fiber ceiling tiles. Non-combustible. Maximum acoustical efficiency. 1960. 8½ × 11. 4 pages.

JOHNS-MANVILLE DRILLED MINERAL TILE. Advantages, illustrations and installation details for these durable, low-maintenance, non-combustible mineral fiber units. 1960. 8½ × 11. 4 pages.

JOHNS-MANVILLE PANELGLAS. Introduces large, low-cost acoustical "lay-in" panels made of J-M Fiber Glass. Ideal for large open areas. Illustrations, descriptive data, installation and specifications. 1960. 8½ × 11. 4 pages.

J-M SANACOUSTIC HCS SYSTEM. Description, design and performance features, and installation data for this patented ceiling system. Provides heating, cooling and sound control from one ceiling. 1960. 8½ × 11. 4 pages.

JOHNS-MANVILLE SOLO-TILE. Product features, illustrations and installation methods for these metal faced, perlite based ceiling tiles. Non-combustible; economical. 1960. 8¼ × 11. 4 pages.

Simpson Timber Company

SIMPSON ACOUSTICAL PRODUCTS. SACMP-09/4916. Complete description and specifications. Tabbed for easy reference. 8½ × 11. 20 pages. AIA No. 39B.

Stran-Steel Corporation

Complete properties and data for 18 and 20 gage steel perforated ceiling deck. Information shows how material is used to provide a combination roof deck and acoustical ceiling unit in one structural element. See Sweet's Catalog No. 13-G.

Vermiculite Institute, *see 147.*

Wheeling Corrugating Company

ACOUSTICAL MATERIALS. Introduces the application of Nailing Channel, Tee and H Bar Systems, solid and open Web Channels to form strong, permanent and economical ceiling systems. 8½ × 11. 4 pages. 2 color (WC-237-A).

Zonolite Company

ZONOLITE PLASTER AND ACOUSTICAL SYSTEMS. Summary of fire tests, principle applications of Zonolite Plaster and Zonolite Acoustical Products specifications. PA-56. 1960. AIA No. 21-A-5 and AIA 39-B. 8 pages. 8½ × 11.

ZONOLITE ACOUSTICAL PLASTIC FOR SOUND CONDITIONING. Technical data sheet, gives properties, tables, and standard specifications. PA-49. 1959. AIA No. 39-b. 2 pages. 8½ × 11.

ZONO-COUSTIC ACOUSTICAL PLASTER. Technical data sheet

gives details on noise reduction and reverberation control in architectural acoustics. PA-54. 1960. AIA No. 39-b. 2 pages. 8½ × 11.

Also see 6, 19 45, 53, 67, 82, 93, 99, 114, 118, 130.

3. Adhesives

The Celotex Corp., *see 2, 43, 74, 97, 113, 121.*

Dodge Cork Co.

DCC-2050 Primer.
DCC-1050 Waterproof Adhesive.
DCC-1200 Tackboard Adhesive.
DCC-1060 Cork Brick Adhesive.

Kentile, Inc., *see 58.*

United States Plywood Corporation

WELDWOOD ADHESIVES. Technical Data Sheets on Weldwood Plastic Resin Glue; Weldwood Contact Cement; Weldwood Presto Set Glue; Weldwood Waterproof Resorcinal Glue. Form 1714.

Vermont Marble Company

MARFIX BULLETIN. A superior cement for marble, granite, stone, glass, ceramic, wood, and any combination thereof. 4 pages. 8½ × 11 with 3 page insert giving technical information.

Also see 29, 66, 89, 90, 117, 120, 142.

4. Admixtures for Concrete

The Tremco Manufacturing Company

TREMCO CRETEMIX–B. An Integral Water Repellent. AIA # 3-B-2.

5. Aggregates

Johns-Manville Sales Corporation

CORALUX PERLITE LIGHTWEIGHT AGGREGATE. C246-9-17-W-11575.

Vermiculite Institute, *see 147.*

Zonolite Company

ZONOLITE PLASTER AND ACOUSTICAL SYSTEMS. Summary of fire tests, principal applications of Zonolite Plaster and Acoustical products, specifications. PA-56. 1960. AIA No. 21-A-5. 8 pages. 8½ × 11.

THIN WALL SECTIONS OF ZONOLITE PORTLAND CEMENT PLASTER. Photos, diagrams, information on Zonolite vermiculite Portland Cement Plaster for spandrel, panel and curtain walls. CA-18. 1955. AIA No. 4-E-13. 4 pages. 8½ × 11.

BLO–CRETE AIR-PLACED VERMICULITE PRODUCT. Fireproofing, encasement, and protective coatings machine applied on industrial buildings, structural steel, furnaces, etc. CA-30. 1957. AIA No. 4-F-1. 4 pages. 8½ × 11.

ZONOLITE ESTIMATING DATA SHEET. Comprehensive mixing, coverage and physical data on Zonolite Insulation products, concrete aggregate, plaster aggregate, plus other products. G-172. 1959. 2 pages. 8½ × 11.

ZONOLITE INSULATING CONCRETE. Summary showing fireproof insulating roof systems on galvanized steel decks, formboard, concrete roof decks and pre-cast roof decks. CA-56. 1960. AIA No. 37-B-2. 8 pages. 8½ × 11.

MONO–KOTE. Direct-to-Steel Fireproofing. Technical data sheet gives standards on application of a one-coat, monolithic fireproofing treatment applied directly to steel floors and beams. PA-53. 1959. AIA No. 21-G. 2 pages. 8½ × 11.

ZONOLITE VERMICULITE AGGREGATE GYPSUM PLASTER. Technical data sheet on the use of vermiculite with gypsum in plaster. PA-52. 1960. AIA No. 21-A-5. 2 pages. 8½ × 11.

ZONOLITE SPRA–INSULATION FOR METAL BUILDINGS. Technical data sheet on pre-mixed insulating and protective material for machine application to interiors of metal buildings. PA-50. 1959. AIA No. 37-B. 2 pages. 8½ × 11.

6. Air Conditioning

American Air Filter Co., Inc.

HERMAN NELSON HERNEL—COOL AIR CONDITIONER FOR SCHOOLS. This literature gives complete information on this year 'round system which provides natural cooling, heating, ventilating and mechanical cooling. Bulletin 635-EIA. 64 pages. 8½ × 11, illustrated, 1961.

HERMAN NELSON NELSONAIRE REMOTE HEATING AND COOLING UNIT. For school offices and other non-classroom use. Bulletin 645-EIA. 4 pages. 8½ × 11. 1960.

HERMAN NELSON PACKAGED LIQUID CHILLER. For school air conditioning systems. Bulletin 675-A1. 16 pages. 8½ × 11. 1958.

Also see 146.

American-Standard, Air Conditioning Division

CATALOG AC–782. Warm Air Heating—Residential and Light Commercial Air Conditioning—Appearing in Sweet's Architectural & Light Construction File. 8½ × 11. 28 pp.

Also see 71.

Michael Flynn Manufacturing Co.

LUPTON CURTAIN WALLS WITH COMFORT–CONDITIONING. Description, capacities, dimensions and specifications for electrically operated air conditioning and heating system built as an integral part of LUPTON curtain wall. 4 pages. PW-319.

NEW FOR MODERN MOTELS. Describes special application of LUPTON curtain wall and Comfort-Conditioning for motels. 4 pages. PW-281 and specification sheet PW 325.

Indiana Limestone Institute, *see 2, 29, 53, 82, 85, 93, 114.*

Minneapolis-Honeywell Regulator Co.

YOU CAN AIR CONDITION YOUR NEW SCHOOL—AND CUT BUILDING COSTS (76-8908). Case histories and expert testimony show how compact design made possible by air conditioning reduces construction costs and increases efficiency of use. 1960. 4 color. 6½ × 8½. 20 pages.

HONEYWELL CENTRALIZED CONTROL SYSTEMS (76-8413). Illustrates and explains Centralized Control for multi-story buildings, smaller buildings and fan rooms. Also highlights Honeywell's field service operation. 1959. 8½ × 11. 2 color. 8 pages.

PRESENTING THE VERY FINEST SCHOOL THERMOSTAT —THE HONEYWELL ROUND (76-4687). Emphasizes the need for classroom comfort in today's schools and explains how the Honeywell Round can assure that comfort. 1959. 8¼ × 11. 4 color. 4 pages.

BRINGS OUT THE BEST IN SINGLE–ZONE AIR CONDITIONING—HONEYWELL AIR CONDITIONING SELECTOR (76-4224). Explains the advantages of being able to adjust temperature, ventilation and fan operation from one convenient location. Illustrates attractive appearance when installed in an office. 1958. 8½ × 11. 4 color. 2 pages. AIA No. 30-E.

NOW FOR SMALL BUILDINGS, TOO . . . ELECTRONIC CONTROL CENTRALIZED FOR AIR CONDITIONING (76-3671). Emphasizes Electronic Air Conditioning Selector for single zone systems and the Control Master central panel for systems of up to seven zones. Gives complete specifications for both panels. 1958. 8½ × 11. 2 color. 6 pages.

Also see 8, 37, 38, 49, 71, 84.

Vermiculite Institute, *see 147.*

Westinghouse Electric Corporation, Air Conditioning Division

WESTINGHOUSE SUMMER AIR CONDITIONING. Full color folder describing operation and application of Westinghouse air cooled, central, split system, residential air conditioning. 8½ × 11. 4 pages.

BUSINESSMAN'S GUIDE TO AIR CONDITIONING. Booklet describing applications and advantages of Westinghouse commercial packaged air conditioning. 7 × 10. 12 pages.

PROFIT IMPROVEMENT THROUGH AIR CONDITIONING. Interesting, illustrated booklet pointing out many cost saving

Air Conditioning continues—

factors resulting from application of air conditioning to industry—Many applications and air conditioning systems utilizing Westinghouse equipment are described. 8½ × 11. 8 pages.

Also see 71.

Wheeling Corrugating Company

WHEELING SOFTITE GALVANIZED SHEETS. Describes SofTite and SofTite Cop-R-Loy (copper bearing) Galvanized Steel Sheets, the recognized standard for good looking, long lasting trouble free air conditioning ducts and other products. Included are: an explanation of Wheeling's outstanding "annealing-out-of-line" process of coating steel with zinc; photographs of products and installations where SofTite has been used to great advantage; reasons why SofTite is combined with Cop-R-Loy for long lasting roofing, siding and sheets for farm and industry. WC-255. 16 pages.

Also see 2, 19, 45, 53, 67, 82, 93, 99, 114, 118, 130.

7. Air Diffusers

S. H. Pomeroy Company

POMEROY CUSTOM STEEL ENCLOSURES for perimeter wall air-conditioning and convector units. Architectural details illustrate the many variations possible to meet design and mechanical requirements.

Also see 14, 70, 80, 152.

8. Air Filters

American Air Filter Co., Inc.

DRI-PAK SERIES 2000. Description and full specifications for new unit filter, high efficiency, dry type. Bulletin 228. 8 pages. 8½ × 11. 1961.

Also see 6, 146.

Minneapolis-Honeywell Regulator Co.

WOULD YOU ALLOW A LOAD OF SMOKE, DUST AND BACTERIA TO BE DUMPED IN THE MIDDLE OF YOUR BUILDING EVERY DAY? (76-4599). Compares mechanical cleaners with electronic air cleaners and shows the advantages of the electronic method. Illustrates and explains four Honeywell Electronic Air Cleaner models. 1959. 8½ × 11. 2 color. 4 pages.

A CLOSE LOOK AT AIRBORNE DIRT, WHAT IT DOES, AND WHAT WE CAN DO ABOUT IT (76-3305). Illustrated booklet identifies the sources of airborne dirt and its effect on office and other commercial buildings. Explains how Honeywell Electronic Air Cleaners can eliminate 90% or more of all dirt particles and reduce building operating expenses. 1958. 5½ × 8½. 2 color. 24 pages.

HONEYWELL ELECTRONIC AIR CLEANERS AND CHARCOAL FILTERS (76-8409). Illustrates and explains Selector Series Electronic Air Cleaners and gives description, types, capacities, efficiencies and available models. Also highlights Activated Charcoal Air Filters and Honeywell's field service operation. 1959. 8½ × 11. 2 color. 12 pages.

Also see 6, 37, 38, 49, 71, 84.

9. Aluminum Products

Allied Chemical Corp., Barrett Div., *see 73, 97, 102, 109, 118, 121, 124, 142, 148.*

Indiana Limestone Institute, *see 2, 29, 53, 82, 85, 93, 114.*

Kaiser Aluminum & Chemical Sales, Inc.

KAISER ALUMINUM IN ARCHITECTURE. Properties of architectural aluminum alloys; alloy selection guide; sheet and extrusion products for architectural applications (curtain wall and other), finishes for architectural aluminum. 1960. 8½ × 11. 24 pages. AIA 15-J.

KALCOLOR FINISHES. Kalcolor, trade name for new anodic process developed and licensed by Kaiser Aluminum, produces range of lightfast color finishes for architectural aluminum sheet, extrusions; colors include gold, tan, brown, gray, black. 1960. 8½ × 11. 16 pages. AIA 15-E.

INDUSTRIAL BUILDING PRODUCTS. Ribbed siding (4", 8", 5.33" pitch); v-beam roofing and siding; corrugated roofing and siding; field assembled insulated sandwich walls; accessories and fastening systems. 1960. 8½ × 11. 12 pages. AIA 12-C.

KAISER ALUMINUM DOMES. Detailing practices data for integration of stressed-skin dome structures into building project designs. 1960. 8½ × 11. 8 pages. AIA 17-A.

COPINGS AND GRAVEL STOPS. Extruded copings for 8" and 12" walls; three types of extruded gravel stops and fascia expander system for use with copings or gravel stops; accessories. 8½ × 11. 12 pages. AIA 15-L.

WINDOW SILLS. Extruded type A sill with clip for use as unit on single openings up to 20' wide or as continuous sill for openings of any length; extruded type B sill for unit sill openings up to 6'. 8½ × 11. 4 pages. AIA 14-B.

THRESHOLDS. Five types of extruded thresholds to meet various doorway floor conditions, interior and exterior. 8½ × 11. 6 pages. AIA 15-L.

ROD, BAR, PIPE, TUBE. Extruded rounds, squares and hexagonals and single and double finned tube. 8½ × 11. 4 pages. AIA 15-L.

ARCHITECTURAL AND STRUCTURAL SHAPES. Extruded architectural angles, channels and tees, and structural angles, channels, tees, zees, beams; lists elements of sections. 8½ × 11. 12 pages. AIA 13-H.

FACING SYSTEM. Seven basic interlocking extruded components plus cap and sill stops, furring zee, clip; alternating shallow channels with raised flats; adaptable to vertical or horizontal installation. 8½ × 11. 6 pages. AIA 15-L.

HANDRAILS. Extruded pipe handrail and fittings; seven extruded ornamental handrail sections. 8½ × 11. 6 pages. AIA 14-D-4.

CARE, CLEANING AND MAINTENANCE OF ARCHITECTURAL ALUMINUM. Types and characteristics of finishes; procedures to protect finishes during construction; cleaning and maintenance measures following installation. 8½ × 11. 12 pages. AIA 13-E.

CHAIN LINK FENCE OF ALUMINUM. Detail drawings of fence types, components, accessories; alloy recommendations; pipe elements of section; suggested specifications. 8½ × 11. 12 pages. AIA 14-K.

ALUMINUM CULVERTS. Design, selection, installation data; suggested specifications. 1960. 8½ × 11. 12 pages. AIA 12-N.

RIGID ALUMINUM ELECTRICAL CONDUIT. Application, design installation, job planning data. 8½ × 11. 32 pages. AIA 31-C-62.

Olin Mathieson Chemical Corporation, Metals Division

OLIN ALUMINUM MILL PRODUCTS AND CASTING ALLOYS. Tables and data on alloys, shapes and sizes in sheet and plate, extruded shapes, rod and bar, pipe and tubing and ingot available for fabricating aluminum building products. Includes a variety of useful information on fabrication characteristics, properties, etc., and directory of sales offices and distributors coast to coast, who can supply material and aluminum technical information locally. 8½ × 11. 24 pages.

ALUMINUM IN ARCHITECTURE. General survey of special Olin services in assisting architects and building products manufacturers in the application of aluminum for best results. Includes discussion of protective measures, maintenance, best alloys for particular applications, properties, finishes, and a suggested outline for specifying. 8½ × 11. 20 pages. AIA No. 15-J.

Kawneer Co., *see 29, 30, 34, 41, 44, 86, 135, 152, 153.*

Winco Ventilator Company

COMMERCIAL WINDOWS, PROJECTED AND CURTAIN WALL FOR COMMERCIAL AND MONUMENTAL BUILDING. 8½ × 11. 20 pages.

10. Anchors and Ties

Ramset Fastening System, Winchester-Western Div. Olin Mathieson Chemical Corp., *see 45.*

Carthage Marble Corporation

C M ANCHORING BROCHURE shows new anchoring device for setting large exterior panels of marble, stone, granite and other masonry materials. This system is adaptable to multi-story curtain wall construction and is well illustrated by photos, detail drawings and specifications.

Gregory Industries, Inc., Nelson Stud Welding Div.

COMPOSITE CONSTRUCTION FOR BUILDINGS. Defines composite steel-and-concrete design and explains its advantages in building construction. Illustrates and describes its use in a number

of outstanding structures in which Nelson stud shear connectors were used. 8½ × 11. 12 pages.

STUD WELDED ANCHORS FOR CONCRETE. Shows how Nelson standard stud anchors are used to reduce fabricating costs on bridges and wherever anchors are required in building construction. 8 pages. 8½ × 11.

11. Arches, Glued Laminated

Timber Structures, Inc., *see 62.*

12. Architectural Metal Products

Kawneer Company

SET OF FOUR product jackets suitable for use in Kawneer Reference Handbook. Provides detailed descriptions, specifications and tracing sheets for Curtain Walls, Windows, Entrances, Building Fronts, Canopies.

National Association of Architectural Metal Manufacturers

ARCHITECTURAL METAL BULLETINS. 15 Bulletins published as supplements to the Architectural Metal Handbook. Photographs selected to illustrate distinct uses of Architectural Metal are accompanied by construction details. Articles on metal items are presented with practical suggestions for their use in current construction.

ARCHITECTURAL METALS MAGAZINE. A monthly magazine presenting the story of "The Future is Metal" in an interesting style . . . it presents new and timely information about recent developments in the Architectural Metal Industry . . . it touches upon important applications of iron, aluminum, stainless steel, bronze and other ferrous and non-ferrous metals in the building and related fields.

Olin Mathieson Chemical Corporation, Metals Division, *see 9.*

Penn Metal Company, Inc., *see 42, 61, 67, 82, 99, 113.*

13. Backwater Valves

Josam Manufacturing Company

BACKWATER VALVES. Sewer and terminal valves to guard against backwater; product illustrations, installation diagrams, and operational details. 1959. 8½ × 11. 8 pages. AIA. No. 29-C-7.

14. Blackboards

Johns-Manville Sales Corporation

NEW DIRECTIONS IN CHALKBOARDS. Three-color illustrated brochure containing design suggestions for use of J-M Colorlith asbestos-cement chalkboards. Includes full property data. 1960. 16 pages. 8½ × 11.

S. H. Pomeroy Co.

LITE-Lift vertical sliding system. Simplified complete system for vertical sliding chalkboards, tackboards, wardrobe closures, pass windows. AIA No. 35-B-1.

Also see 7, 70, 80, 152.

United States Plywood Corporation

WELDWOOD CHALKBOARD. Complete information on Weldwood Chalkboard in school and commercial installations. 1958. 8½ × 11. 8 pages. Form #2128.

WELDWOOD FOR SCHOOL CONSTRUCTION AND REMODELING. Description of Chalkboard and other Weldwood products for schools. 8½ × 11. 20 pages, Form #1621.

15. Bulletin Board

Congoleum-Nairn, Inc.

CONGOLEUM-NAIRN BULLETIN BOARD CORK. Complete details, colors and recommended uses for Bulletin Board Cork, new E-Z clean, plastic sealed Bulletin Board Cork and new Takork.

Dodge Cork Company

DODGE CORK COMPANY BROCHURE. Contains samples of comprehensive line of vinyl faced, burlap backed and unsupported cork tackboard. All colors shown. Complete installation specifications. AIA No. 35-N-3.

United States Plywood Corporation

WELDWOOD BULLETIN BOARDS. Descriptions and illustrations. 4 pages. 3½ × 8½. Form 1900.

16. Carpets

Dodge Cork Company

DODGE CORK CARPET PADDING.

17. Caulking Compounds

Allied Chemical Corp., Barrett Div., *see 73, 97, 102, 109, 118, 121, 124, 142, 148.*

DAP inc.

GENERAL CATALOG. Covering all DAP Caulking, Glazing and Sealing Products. 8½ × 11. 26 pages.

SWEET'S INSERT. Covering DAP Caulking, Glazing, Sealing Products with specification information and including information about DAP Technical Service Program for architects.

DATA SHEETS. Describe DAP Flexiseal Non-Sag and Pourable Liquid Polymer Joint Sealant with Thiokol base, also DAP Butyl-Flex caulking. 8½ × 11. 7 pages.

National Paint, Varnish and Lacquer Association

CAULKING COMPOUND MANUAL. Circular 770.

The Tremco Manufacturing Company

TREMCO CAULKING AND POINTING COMPOUND WITH TREMTHOL FOR LONGER LIFE. AIA No. 7-D.

TREMCO LASTO-MERIC ADHESIVE SEALING COMPOUNDS. AIA No. 7-D; 24-A; 25-A-51.

18. Ceiling, Luminous

The Wakefield Company

WAKEFIELD CEILING. Illustrated Spec-Data sheet giving complete instructions for laying out the Wakefield Ceiling using listed component parts.

THE WAKEFIELD TROFFER. Spec-Data sheets for each of 4 sizes of the Wakefield Troffer, 1′ × 8′, 1′ × 4′, 2′ × 4′ and 2′ × 2′. Eight types of light control and adaptable to illustrate ceiling constructions.

THE WAKEFIELD TWENTY. A quickly installed pre-assembled luminous ceiling unit which can be mounted in about 20 minutes. Spec-Data sheet illustrates 4 types of light control, mounting dimensions and coefficient of utilization tables.

19. Ceiling, Suspended Systems

The Celotex Corporation, *see 2, 43, 74, 97, 113, 121.*

Sanymetal Products Co., Inc.

SUSPENDED CEILING SYSTEMS, CATALOG NO. NSP-8. Four types of Sanymetal Suspended Ceiling Systems with complete specifications for each type and covering use with any type of ceiling and acousitcal material; details of installation of different type ceiling materials illustrated and described. 1957. 8½ × 11. Color. 4 pages. AIA No. 39-B-1.

Vermiculite Institute, *see 147.*

Wheeling Corrugating Company

CEILINGS, SUSPENDED SYSTEMS. Introduces the application of Nailing Channel, Tee and H Bar Systems, solid and open Web Channels to form strong, permanent and economical ceiling systems. 8½ × 11. 4 pages. 2 color (WC-237-A).

Also see 2, 6, 45, 53, 67, 82, 93, 99, 116, 118, 130.

20. Cement

Allied Chemical Corp., Barrett Div., *see 73, 97, 102, 109, 118, 121, 124, 142, 148.*

Portland Cement Association

COLOR AND TEXTURE. Handbook describes the architectural effects possible with the aggregate transfer method of obtaining

Cement continues—

exposed aggregate finishes. This technique makes it possible to achieve such finishes on cast-in-place, as well as precast, concrete work. Step-by-step description, profusely illustrated, explains the construction steps typical of aggregate transfer. 8½ × 11. 14 pages.

Universal Atlas Cement Division, United States Steel Corporation

FOR FINE TERRAZZO—ATLAS WHITE CEMENT. Color brochure containing 22 true-color reproductions of terrazzo specimens with formulae. Also complete specifications and installation details. 1961. 8 pages. 8½ × 11.

ATLAS WHITE CEMENT CATALOG. Contains general information on white portland cements (regular, air-entraining and waterproof) for use in terrazzo, precast concrete, stucco, paint, highway curbing and traffic markers, building products, masonry units, reflecting floors, swimming pools, etc. 1959. 24 pages. 8½ × 11.

FOR BETTER MASONRY MORTAR—ATLAS MASONRY CEMENT. Catalog outlining the composition, advantages and properties of masonry cement. Also includes recommended practices covering materials, proportioning, mixing, workmanship. Plus handy reference tables. 1960. 20 pages. 8½ × 11.

WHITE CONCRETE IN ARCHITECTURE. Brochure illustrating the use of precast white concrete panels, facings and cast stone units in building design. Provides basic information on exposed aggregate, color, texture, pattern, shape, insulation, etc. Also includes typical installation details. 1961. 32 pages 8½ × 11.

21. Ceramic Tile

American Olean Tile Company

BOOKLET 211. Catalog of glazed, unglazed, and Murray quarry tile products along with technical information appearing in the 1961 Sweet's Architectural File. 8½ × 11. AIA No. 23a.

BOOKLET 551. New and distinctive patterns in unglazed ceramic tile. 8½ × 11. AIA No. 23a.

BOOKLET 452. New color combinations and uses for tile in different areas of the home. 8½ × 11.

BOOKLET 1021. New and popular Crystalline Glazes and Scored Tile for floors and walls. 8½ × 11.

FOLDER 507. Information on Conduct-O-Tile® which eliminates static build-up in operating rooms. 8½ × 11. AIA No. 23a.

Folder 501. Specifications and installational information on Conduct-O-Tile®. 8½ × 11. AIA No. 23a.

BOOKLET 910. Uses of new and popular Large Size Glazed tile in all types of installations. 8½ × 11. AIA No. 23a.

MASTER-SET® AND PERMA-BAK®. New mounted glazed and unglazed tile. 8½ × 11.

MANUAL 801. Standards and specifications for indoor and outdoor swimming pools along with details of pool areas. 8½ × 11. AIA No. 23a.

FOLDER 701. Complete line of china bathroom accessories. 8½ × 11. AIA No. 23a.

BOOKLET 620. Colorful illustrations of ceramic tile in a wide variety of school areas. 8½ × 11. AIA No. 23a.

BOOKLET 570. Surfacing Macotta Curtain Wall Panels with American Olean ceramic tile. 8½ × 11. AIA No. 17a.

Cambridge Tile Manufacturing Company

SUNTILE CATALOG. Description of shapes and sizes. Matched color palette of all Suntile colors. Color reproductions of all patterns designed by Max Spivak. 20 pages.

SETFAST WALL TILE BROCHURE. General information and specifications for revolutionary new method of installing 1½ sq. ft. of 4¼ tiles at one time.

SETFAST CERAMIC MOSAIC BROCHURE. Technical data on installation procedures using Setfast ceramic mosaics mounted on 2′ × 1′ sheet.

SETFAST SPECIFICATIONS. Suggested specifications for the use of both ceramic mosaics and wall tile: 4¼ × 4¼, 6 × 4¼, 8½ × 4¼.

LION-BOND BROCHURE. Fully explains new mastic for use with ceramic tile—need only mix with water, non-inflammable, water resistant, exceeds CS-181-52 requirements.

HORIZON TILE. Actual palette of 58 irregular shaped ¾" tiles. From the brilliant to the very subtle. Startling new surface texture. Architects or designers samples, *no charge.*

EPOX-E-SET brochure. Explains uses of new acid-alkali resistant grout and mortar for quarry and ceramic mosaic tile. Specifications, sample kits, *no charge.*

SOLAR WALL PANEL DATA SHEETS. Set of specifications and details on various ceramic tile faced curtainwall panels. Sizes to 5′ × 12′.

Ceramic Tile Panels, Incorporated (U. S. Ceramic Tile Company)

1960 CATALOG. Gives complete engineering data and descriptions of 5 types of ceramic tile faced curtain wall panels.

SPECIFICATIONS. A complete product specification ready for your use and mark-up.

The Mosaic Tile Company

THE MOSAIC WORKBOOK FOR ARCHITECTS. 40 pages showing examples of the complete Mosaic tile line. 8½ × 11. AIA No. 23-A. Form 256.

MOSAIC 1961 SERVICE PLAN. Tile most readily available from Mosaic Warehouses East of the Rockies. Wall and floor tile, Carlyle quarry tile, decorated strips and All-Tile Accessories. 8 pages. 8½ × 11. AIA No. 23-A. Form 254.

MOSAIC MEDLEY BOOK. Wide variety of Medley patterns in full color, with installation views. 12 pages. 8½ × 11. AIA No. 23-A. Form 211.

ELEGANCE FOR MODERNS. Full-color illustrations of new Byzantile patterns in ceramic mosaic, with installation views. 24 pages. 8½ × 11. AIA No. 23-A. Form 219.

MOSAIC TILE IN BUILDINGS OF TODAY. Tile ideas and installations in public buildings, institutions and factories. 32 pages. 8½ × 11. Color. AIA No. 23-A. Form 208.

MOSAIC TILE IN HOSPITALS. Including data on Electrically-Conductive Floor Tile. 13 pages, 8½ × 11. AIA No. 23-A. Form 228.

PACIFIC COAST COLOR CATALOG. Full-color palette of all Mosaic ceramic tile made in California. 20 pages. 8½ × 11. AIA 23-A. Form 237. (*For use west of the Rockies.*)

PACIFIC COAST CARLYLE QUARRY TILE FOLDER. Color palette of quarry tile made in California. 2 pages. 8½ × 11. AIA No. 23-A. Form 216. (*For use west of the Rockies.*)

PACIFIC COAST 1961 SERVICE PLAN. Tile and accessories most readily available from Mosaic Pacific Coast warehouses. 4 pages. 8½ × 11. AIA No. 23-A. Form 255.

Stylon Corporation

FULL LINE of ceramic floor and wall tile and vitreous china bathroom accessories.

CATALOG. Complete guide to Stylon ceramic tile, including West Coast Division, Redondo Tile Company, Redondo Beach, Calif. 12 pages. From Sweet's Catalog.

RESIDENTIAL IDEAS. Galaxy of colorful shots involving extended uses of ceramic tile in original ways. Roman (sunken) bath and conventional bathroom folder also available.

DESIGN SERVICE available. Architects' Sample Portfolio on request.

United States Ceramic Tile Company

1961 ROMANY-SPARTAN CATALOG. R-S 238. Complete, showing all shapes, sizes and physical properties, color and textures of curent Romany-Spartan tiles.

CERAMAFLEX. R-S 228. The new resilient ceramic flooring. 12 colors. 64 1" × 1" ceramic mosaic tiles permanently bonded into a flexible rubber grid.

TECHNICAL BULLETIN. R-S 234. Ceramaflex floor tile. Questions and answers concerning this new product. Rubber grid. Where to install. Subfloor preparation and cleaning and maintenance.

NEW COLOR SELECTION GUIDE. R-S 233. For popular wall and floor tile colors.

DESIGN PORTFOLIO. R-S 230. Illustrates standard designs in new high-fidelity color of actual ceramic mosaic patterns.

THE TALENTS OF ROMANY-SPARTAN TILE IN SCHOOLS AND COLLEGE BUILDINGS. R-S 200. Illustrated with photographs showing areas in which tile can be applied for ease of maintenance. 12 pages. Full color. 8½ × 11.

PORTFOLIO OF IDEAS ON HOME DECORATING WITH CERAMIC TILE. R-S 201. Full color illustration of Romany-Spartan ceramic floor and wall tile in residential use with complete descriptions of tile shown.

SPECIFICATIONS. R-S 199. Complete product specification ready for your mark-up and use under "Section 41."

22. Ceramic Veneer

The Robinson Brick and Tile Company.

ROBCO ⅜ VitriNeer. Introduction to ⅜ VitriNeer, Ceramic Veneer for exterior, interior wall facing and remodeling. 12" × 16" face size, ⅜ inch thick. Color folder shows details of product, guide specification for installation and photo brochure of jobs.

23. Clay Facing Tile

Kraftile Company

GRAPHIC STANDARDS FOR GLAZED TILE. Shape charts, construction details, and specifications for glazed structural wall units for *Western construction.* 1958. 8½ × 11. 33 pages. 4th edition.

24. Cleanout Plugs and Covers

Josam Manufacturing Company

SUPERSEAL CLEANOUTS AND ACCESS COVERS. Catalog CL. Recommendations of cleanouts or covers for every requirement; including specifications, illustrations, dimensions, installation diagrams, code requirements, selection charts for floor and wall-type cleanouts and covers. 1959. 8½ × 11. 18 pages. AIA No. 29-C-31.

25. Communication Systems

Executone, Inc.

1100D SERIES FULLY INTERCOMMUNICATING SYSTEM. System description, equipment, and wiring plans. 8½ × 11. 42 pages. Form 397E.

SS4000 SERIES SCHOOL COMMUNICATIONS SYSTEMS. System description, equipment, wiring plans, specifications. 8½ × 11. 148 pages. Form 482C.

SS300 SERIES ECONOMY SCHOOL SYSTEM. System description, equipment, wiring plans, specifications. 8½ × 11. 122 pages. Form 495C.

BETTER PATIENT CARE. Guide to Executone Hospital Communication Systems, including Multi Audio-Visual Nurse Call, Sound Distribution, Doctors' Paging, and Administrative Intercom. 8½ × 11. 12 pages. Form 475A.

CENTRAL DICTATING COMBINED WITH EXECUTONE INTERCOM. Catalog literature describing a new system of central dictating through intercom master stations. Includes wiring diagram. 8½ × 11. Form 676.

EXPLOSION-PROOF INTERCOM EQUIPMENT. Describes intercom equipment especially designed for hazardous areas in industry. Includes wiring plans. 8½ × 11. 4 pages. Form 275C.

HOME INTERCOM SYSTEM DATA. System description, equipment, wiring plans, specifications for residential intercom system. 8½ × 11. 11 pages. Form 326C.

9800D SERIES. Describes a Zero Level Intercom System using existing wiring. System description, equipment, wiring plans, installation and operating instructions, circuit analysis, and schematics. 8½ × 11. Form 602.

SELECTIVE MULTIPLE HANDSET AND MULTIPLE COUNTER SYSTEMS DATA. System descriptions, equipment, wiring plans, and installation techniques of restaurant-type counter-to-kitchen systems. 8½ × 11. 28 pages. Form 467B.

Also see 125, 128.

Minneapolis-Honeywell Regulator Co., *see 6, 8, 37, 38, 49, 71, 84.*

26. Concrete

Indiana Limestone Institute, *see 2, 29, 53, 82, 85, 93, 114.*

Portland Cement Association

TEXTURES. A few of the multitude of textures that can be obtained on concrete surfaces are covered in this publication. Describes and pictures some board marked, smooth and applied textures. Descriptions are included of the construction methods for obtaining these textures. 8½ × 11. 4 pages.

ARCHITECTURAL CONCRETE SPECIFICATIONS. Specifications are given governing the mix design, forming, concreting, finishing, curing and patching and cleaning of exposed concrete work. Includes provisions for use of plaster waste molds and rubber and plastic form liners. 8½ × 11. 6 pages AIA No. 4-E-1.

DESIGN AND CONTROL OF CONCRETE MIXTURES. Explains water-cement ratio, field control of concrete and methods of designing mixtures and making tests. ASTM Standard Specifications for Concrete and Concrete Aggregates are included. Illustrated. 8½ × 11. 72 pages.

CONCRETE FOR OUTDOOR LIVING. Pictures of popular outdoor living features around the home, such as concrete and concrete masonry patios, fireplaces, swimming pools, garden walls and walks. Four colors. Illustrated. 8½ × 11. 16 pages.

SUGGESTED SPECIFICATIONS FOR CONCRETE WALKS, DRIVEWAYS, APRONS, TERRACES, PORCH FLOORS AND RETAINING AND GARDEN WALLS. Suggested specification for architect, builder and concrete contractor to assist in writing specifications for and building concrete improvements around the home. Drawings and photographs. 8½ × 11. 8 pages.

CONCRETE SIDEWALKS, DRIVEWAYS AND STEPS. Covers recommended practices for construction of concrete walks, driveways, garage floors and steps around the home. Illustrated. 8½ × 11. 8 pages.

Vermiculite Institute, *see 147.*

Zonolite Company

ZONOLITE INSULATING CONCRETE ROOF SYSTEMS. General information, physical data, diagrams, specifications and design data on roof systems. 8 pages. 8½ × 11. AIA No. 37-B-2.

ZONATILE INSULATING PRE-CAST CONCRETE ROOF TILE. Insulating precast roof tile. "U" values, technical data, tables, specifications. CA-39. 1960. 2 pages. 8½ × 11. AIA No. 37-B-2.

SPECIFICATIONS FOR ZONOLITE INSULATING CONCRETE. File of a series of data sheets, each with technical data, diagrams, tables, and specifications for specific roof deck systems and roof insulation. CA-32-47. 1960. 22 pages. 8½ × 11. AIA No. 4-E-13 and 37-B-2.

27. Concrete Forms

Fenestra Incorporated

STEEL HOLORIB REINFORCING FLOOR FORMS. Catalog: details, specifications, design data for architects and engineers.

Georgia-Pacific

GPX HIGH DENSITY OVERLAY PLYWOOD for architectural concrete at lowest forming cost. 8½ × 11. 4 pages. Form #GPX-HD4.

National Lumber Manufacturers Association

DESIGN OF WOOD FORMWORK FOR CONCRETE STRUCTURES. No. 3, new Wood Construction Data series. Provides up-to-date information on use of structural lumber and boards in form-work construction. Complete design data, including formulas and tables, detail drawings and photos of applications. 1959. 18 pages. 8½ × 11. 2 colors. AIA No. 4-D-1.

Portland Cement Association

FORMS FOR ARCHITECTURAL CONCRETE. Published to meet demand for information pertaining strictly to form work for architectural concrete buildings. Only those phases of form construction that apply especially to architectural concrete have been included. Not every conceivable detail has been shown but important phases have been covered with enough problems and examples to enable the careful contractor, though inexperienced in architectural concrete, to produce a thoroughly satisfactory job. Illustrated. 54 pages 8½ × 11.

Concrete Forms continues—

United States Plywood Corporation

WELDWOOD PANELS FOR RE-USABLE CONCRETE FORMS. Details and data on complete line of smooth and textured panels for form use. 10 pages. 8½ × 11. Form 1813.

28. Concrete Masonry

Portland Cement Association

PATTERNS FOR CONCRETE MASONRY WALLS. Drawings show the wide variety of patterns in which concrete masonry can be laid. 8½ × 11. 12 pages.

BEAUTIFUL WALLS WITH CONCRETE MASONRY. Color illustrations of exposed concrete masonry walls in different types of structures. Includes a variety of colors, patterns and textures. 8½ × 11. 16 pages.

RECOMMENDED PRACTICES FOR LAYING CONCRETE BLOCK. Illustrates and describes some of the practices in building a concrete block wall which experienced masons are following and which will result in the highest type of workmanship. Although primarily for masons, booklet will also be helpful to architects, engineers and builders. Illustrated. 8½ × 11. 16 pages.

CONCRETE MASONRY HOMES FOR BETTER LIVING. Exterior and interior views of concrete masonry homes featuring architectural styles most popular today. Includes block floor plans. Four colors. Illustrated. 8½ × 11. 16 pages.

CONCRETE MASONRY CONSTRUCTION IN COLD WEATHER. Presents recommended practices. Photographs illustrate important precautions to be observed. 8½ × 11. 4 pages.

SUGGESTED SPECIFICATIONS FOR APPLICATION OF PORTLAND CEMENT PAINT ON EXPOSED CONCRETE MASONRY WALLS. Describes application of Portland cement paint. Illustrated. 8½ × 11. 4 pages.

CONCRETE MASONRY HANDBOOK FOR ARCHITECTS, ENGINEERS AND BUILDERS. Presents latest recommended practice in concrete masonry construction. Data prepared to assist in designing and constructing concrete masonry buildings that meet modern requirements. Includes technical information developed in the field and in the research laboratory. Illustrated. 8½ × 11. 64 pages.

CONCRETE MASONRY FOR SCHOOLS. Concrete masonry in exteriors and interiors of schools throughout the country. Photographs 8½ × 11. 8 pages.

LET'S STOP THERE. Shows attractive motels built with concrete masonry for lasting beauty at low cost. 8½ × 11. 8 pages.

GRACIOUS HOMES OF LIVING CONCRETE. Depicts various attractive uses of exposed concrete masonry for exteriors and interiors of modern homes. Four-colors. Illustrated. 11 × 8½. 8 pages.

28A. Cove Base

Indiana Limestone Institute, *see 2, 29, 53, 82, 85, 93, 114.*

29. Curtain Walls

American Art Metals Company

TRIMLINE WALLS and HV TRIMLINE. Catalog and selection guide showing curtain wall systems. Contains details and specifications. Incorporates Amarlite aluminum entrances, store fronts, 24 pages AIA No. 17-A.

American-Saint Gobain Corporation

SPANDREL GLASSES. Describes Huetex, a colored, heat-tempered, aluminum backed facing glass, as well as the use of other flat glasses for curtain wall and panel construction. Color chart of standard colors. 4 pages. 8½ × 11. AIA-17-A.

Also see 63.

The Celotex Corp., *see 2, 43, 74, 97, 113, 121.*

Fenestra Incorporated

GENERAL CATALOG. Covers details and specifications on following curtain wall systems—Aluminum: Fenwall Series 1 & 2; Double Hung (DHA 2 & 3); Steel: Fenmark Series 1, 2 & 3; Fenestrawall, Double Hung (S-200). Additional information on heat transfer, infill panels, sealants and finishes.

Michael Flynn Manufacturing Company

LUPTON CURTAIN WALLS, 1961 Catalog describes the elements of LUPTON aluminum curtain walls. Typical installations in full color. 24 pages AIA No. 17-A.

LUPTON ALUMINUM CURTAIN WALLS. Handbook with 70 pages of standard construction and application details for Lupton curtain walls. AIA No. 17-A.

The Georgia Marble Co., *see 118, 134, 143.*

Gregory Industries, Inc., Nelson Stud Welding Division

THE SANDWICH WALL STORY. Shows how insulated aluminum sandwich walls are field-assembled with the Nelson stud welding method and Setlok fasteners. 20 pages. 8½ × 11.

Indiana Limestone Institute

WALL PANELS. Catalog 243.

Also see 2, 53, 82, 85, 93, 114.

Inland Steel Products Company

INLAND WALL PANELS, CATALOG NO. 243. Describes two lines of insulated wall panels, available in galvanized or painted steel and leather-grained aluminum. Two exterior panel configurations offer either a fluted shadow or deep ribbed shadow effect. Exterior panel sections may be used alone as a non-insulated siding for unheated buildings. 8 pages. 8½ × 11. AIA No. 17-A.

Kawneer Co.

ALUMINUM WALL SYSTEMS. Detailed description, full line Kawneer Wall Systems with typical details, photos, technical information and specifications. AIA No. 17-A.

Also see 30, 34, 41, 44, 135, 152, 153.

Libbey-Owens-Ford Glass Co.

VITROLUX SPANDREL GLASS. Illustrates L.O.F.'s curtain wall material of color-fused heat-strengthened plate glass. 1960. 8½ × 11. 16 pages.

Also see 30, 33, 63, 135, 153.

Marble Institute of America, Inc., *see 89, 90.*

Mo-Sai Institute, Inc.

MO-SAI DESIGN DETAILS HANDBOOK 1961. Revised edition contains full page design details on Mo-Sai use as curtain wall and facing. Various types of integral insulation and anchoring methods shown. Newest specifications. Convenient lay-flat binding for ready reference. AIA No. 4-K-1.

The Mosaic Tile Co., *see 21.*

National Association of Architectural Metal Manufacturers

METAL CURTAIN WALL MANUAL. Authoritative reference manual (looseleaf binder) for design and construction of metal curtain walls. Additional material issued from time to time as rapidly as it can be developed and printed. All data will be kept up to date to reflect the latest practice continually.

Pittsburgh Plate Glass Co., *see 63.*

Portland Cement Association

CONCRETE CURTAIN WALLS. Data covering characteristics of concrete curtain walls in: colors, textures, patterns, panel shapes, cost, availability, insulation, maintenance and fire resistance. A few typical attachment details are included. Full color photographs of many concrete curtain wall buildings are featured. 32 pages. 8¾ × 11½, AIA No. 4-K-1.

Stran-Steel Corporation

COLOR COATED ARCHITECTURAL STEEL PANELS. Nine colors for modern ribbed steel panels; design examples and application drawings.

United States Plywood Corp.

DESIGN MANUAL ON WELDWOOD CURTAIN WALL PANEL. Description and installation details. 32 pages. 8½ × 11. Form #1720.

Vermiculite Institute, *see 147.*

Vermont Marble Co.

VERMARCO PANEL-WALL. Marble curtain wall panels and complete curtain wall systems. Details and specifications of Flush-

Mount Panels, Grid-Wall Panels and Window-Wall Panels using ½" thin marble facings. 8 pages. 8½ × 11. AIA. No. 17-A.

Also see 3, 66, 89, 90, 117, 120, 142.

Winco Ventilator Company, Inc.

ALUMINUM CURTAIN WALLS AND WINDOW WALL SYSTEMS. A new way to contemporary design and modern building efficiency. 20 page catalog.

30. Doors

Fenestra Incorporated

FENESTRA HOLLOW METAL SWING DOOR UNITS CATALOG. Product description, hardware sizes and specifications. 1⅜", 1¾" full flush type, 1¾" panel type, 1¾" flush panel type entrance and underwriter label swing doors, metal folding closet doors. Units consist of door, frame and hardware.

Formica Corporation, *see 104.*

Georgia-Pacific

G-P FLUSH DOORS. Brief information covering a complete line of residential, commercial, and institutional hollow and solid core flush doors. Special treatments on light and louver openings are included. 4 pages. 8½ × 11.

Hough Manufacturing Corporation

RA-TOX FASHIONFOLD BASSWOOD SLAT FOLDING DOORS. #780C. Catalog with details, specifications and photos of actual installation. 2 pages. 8½ × 11.

RA-TOX MAHOGANY SLAT FOLDING DOORS. #1194. 4-color illustration of actual installations, sizes and descriptions. 2 pages. 8½ × 11.

RA-TOX "66" BASKETWEAVE FOLDING DOORS. #F-1291. 2-color illustration, with details, colors, sizes. 1 page. 8½ × 11.

HUFCOR LAMINATED ACCORDION DOOR. #1256–12. 4-color brochure listing features, details, specifications, track and switch details, acoustical data, hardware and accessories. 12 pages. 8½ × 11. AIA No. 16-M.

WARDROBE AND STORAGE CLOSET DESIGNS AND IDEAS. #F794A. Brochure showing multiple uses of Ra-Tax Doors for ventilated closets, storage walls, minimum suggested storage area dimensions, installation details, etc. 6 pages. 6¾ × 8.

CONSTRUCTION OF CLOSETS. #F824A. Detailed plans showing step-by-step requirements for building adjoining closets, side-by-side closets, back-to-back closets, free standing, full access closets, details for stud walls, shelves, brackets, etc. for use of Ra-Tox woven wood slat folding doors. 6¾ × 8½.

HOW CHURCHES HAVE MULTIPLIED SPACE WITH HUFCOR PARTITIONS. #1183. Actual installations and floor plans showing how churches have solved their partition problems with folding doors. Points up problems to be considered in selection of folding doors and partitions. 36 pages. 7 × 9¾.

EFFECTIVE SOUND CONTROL WITH HUFCOR #364 STEEL CORE LAMINATED ACCORDION DOORS. #S-2315. A kit containing actual steel core laminated accordion door cover section, acoustical test data, newest sound lab testing methods, articles on sound retarding principles applied to folding partitions and specifications, descriptions, etc. AIA No. 16-M. 9 × 12.

SPACESAVER FOLDING WOOD DOOR. #1961. Architectural catalog lists features, construction details, specifications, installations, track and switch details, Spacesaver exclusive hardware and accessories for both "Regular" and "Giant" folding wood doors in residential or commercial applications. AIA No. 16-M. 8½ × 11.

Kawneer Co.

THE SECOND NEW IDEA IN ENTRANCES. Comprehensive booklet including full information and data on five different types of aluminum and stainless steel doors, frames and hardware to handle all entrance requirements. AIA No. 16-E.

Also see 29, 34, 41, 44, 135, 152, 153.

Libbey-Owens-Ford Glass Company

TUF-FLEX GLASS DOORS. Technical data on Tuf-flex glass doors, including installation details and sizes. 1960. 12 pages. 8½ × 11. AIA No. 17-A.

Also see 29, 33, 63, 135, 153.

Pittsburgh Plate Glass Co., *see 63.*

Rolscreen Co.

PELLA WOOD FOLDING-DOORS, SWEET'S REPRINT. General information; dsecription; specifications; dimensions for detailing. 1961. 8 pages. 8½ × 11. AIA No. 16-M.

Security Fire Door Company

SECURITY INDUSTRIAL AND COMMERCIAL DOORS. Basic information on use and application of: Telescoping, Sliding, Swinging, Fire, Bi-Parting, Bi-Folding doors. Various panel constructions. Extra features. Complete specifications for some types. Details, engineering data, clearances, space requirements. Photographs. 1960. 8 pages. 8½ × 11. AIA No. 17-A-2.

SECURITY FREIGHT ELEVATOR, DUMBWAITER AND CONVEYOR DOORS AND FREIGHT ELEVATOR GATES. Complete data, all type constructions; applications, requirements, different panel constructions, specifications, clearances; space requirements, elevator shaft framing requirements; Underwriters Label data; different types and applications of power operators, where and how to apply special constructions. Construction details, photographs, tables, and photographs of outstanding architectural installations. 1960. 16 pages. 8½ × 11. AIA No. 33-G.

SECURITY COST SAVING FREIGHT ELEVATOR AND INDUSTRIAL DOORS. Covers general information and essential requirements that building owners need to know when they consider the cost of their equipment throughout the life of their buildings, as both a functional part of their material moving equipment, and as a permanent part of the building structure. Information on essential part of Controlled-Operation in cutting building and operational costs. 1960. 4 pages. 8½ × 11.

SECURITY MAGNE-GRIP OPERATORS. *Freight Elevator Door Operator that mounts on Elevator Car.* Especially economical to use in modernizing existing installations as well as for use on new installations. Applications, exclusive advantages, method of operations, how use has made it possible to renovate outdated buildings, installations, photographs. 1960. 10 pages. 8½ × 11.

Simpson Timber Company

DOORS—SPDMP-024/4914. Information including illustrations of available patterns for sash, panel, stile and rail, French, screen, Seven-Eleven, entrance, louver, jalousie, garage, bifold and Symphonic doors. 4 pages. 8½ × 11. AIA File 19-E-1.

United States Plywood Corporation

WELDWOOD ARCHITECTURAL DOORS. Describes complete line of Weldwood doors. 12 pages. 8½ × 11. Form No. 2127.

31. Doors, Garage

California Redwood Association, *see 88.*

Fenestra Incorporated

RESIDENTIAL GARAGE DOORS. Product description, installation details, sizes, specifications.

Overhead Door Corporation

THE OVERHEAD DOOR, Sectional, upward-acting door for commercial buildings, industrial plants, residential garages.

32. Doors, Labeled

Fenestra Incorporated

FENESTRA 1⅜" full flush underwriter "B" or "C" label doors, which pass 1½ hour test. Catalog covers details and specifications.

FENESTRA 1¾" panel and flush panel underwriters "B"—"C" "D" and "E" label doors which pass 1½ or ¾ hour tests. Catalog contains details and specifications.

33. Doors, Sliding

Arcadia Metal Products

ARCADIA STEEL AND ALUMINUM FRAMED SLIDING GLASS DOORS. Complete description and data for specifying Arcadia sliding glass doors. Details; list of stock sizes; doors available for single and double glazing (⅝" and 1" insulating glass). Catalog sheets and detail packets.

Doors, Sliding continues—

Fenestra Incorporated

FENESTRA 1¾" panel type sliding doors. For use in industrial type buildings.

Libbey-Owens-Ford Glass Company

SLIDING GLASS DOORS. Illustrates Parallel-O-Plate and Thermopane sliding doors in homes, schools and commercial buildings. 1958. 2 color. 12 × 9.

Also see 29, 30, 63, 135, 153.

Pittsburgh Plate Glass Co., see 63.

Rolscreen Company

PELLA WOOD SLIDING GLASS DOORS. Sweet's Reprint. Information, description, photos and details. 1961. 8 pages. 8½ × 11. AIA # 16-N.

Sun Valley Industries, Incorporated (Subsidiary of Kawneer Company)

SUN VALLEY SLIDING DOOR CATALOG. Contains complete information including colors on Sun Valley Imperial Weatherwall, Senior Door and Junior Door Series. AIA File 16-E.

SUN VALLEY DECORATOR SERIES SHEET illustrating Epoxi-Color. Shows various colors in which Sun Valley Sliding Doors are available.

United States Plywood Corporation

PANIFLEX BIFOLD DOORS. Description and installation details. 2 color. 6 pages. 8½ × 11. Form 2059.

34. Door Closers & Controls

Kawneer Company

KAWNEER AUTOMATIC ENTRANCE. Describes the Kawneer Entrance Unit. Full information and illustrations, including specifications. Also describes and gives specifications for Kawneer concealed overhead closer entrances.

Also see 29, 30, 41, 44, 135, 152, 153.

LCN Closers, Incorporated

COMPLETE LINE OF LCN PRODUCTS. Catalog No. 16. Includes details and dimensions for drafting room and specification references. 1960. 48 pages. 8½ × 11.

LCN EXPOSED DOOR CLOSERS. Full catalog treatment of the exposed closers only, with brackets and accessories. 1961. 12 pages. 8½ × 11.

LCN CONCEALED-IN-DOOR CLOSERS. Descriptive details, dimensions, installation diagrams and tables for four forms of these closers. 1958. 8 pages. 8½ × 11.

LCN OVERHEAD CONCEALED CLOSERS, 200 Series. Full catalog treatment of the 3 overhead concealed closers with disappearing arm. 1958. 8 pages. 8½ × 11.

LCN OVERHEAD CONCEALED CLOSERS, 500 Series. Full catalog treatment of the 3 closers concealed in head frame, with exposed arm. 1959. 8 pages. 8½ × 11.

LCN "SMOOTHEE" CLOSERS, for Exterior and Interior Doors of all normal sizes. Full descriptive and dimensional data, sizes, brackets, arms, etc. for these new surface-applied closers of pleasing appearance. 1961. 8 pages. 8½ × 11.

CONDENSED CATALOG OF LCN DOOR CLOSERS. Sweet's Catalog. 1961. 8 pages. 8½ × 11.

Minneapolis-Honeywell Regulator Co., see 6, 8, 37, 38, 49, 71, 84.

Norton Door Closer Company

CATALOG NO. 57. COMPLETE LINE OF NORTON DOOR CLOSERS. Descriptive material, detailed drawings, complete information on Norton Door Closers for all types of applications. Includes useful information on door closer design, selection, and problems of door control. Revised 1959. 30 pages plus templates. 8½ × 11. AIA No. 27B.

TRIMLINE FOLDER. Information on new Norton *Trimline* surface-mounted door closers. 4-color. 4 pages. 1959. AIA No. 27B.

MANUAL T. Design details, installation information, and construction data on the new Norton Series 1500 *Trimline* door closers. 4 pages. 1960. AIA No. 27B.

COM-A-DOOR FOLDER. Complete information on new Norton Series 800 Com-A-Door closer for wood or metal combination or jalousie doors. 4 pages. 1959. AIA No. 27B.

NORTON AUTOMATIC DOOR OPERATORS. Information on new Norton Automatic Door Operator. Both concealed and surface-applied models illustrated. 4 pages. 1959.

MANUAL N. Complete information on Norton Narrow-Projection surface closers, Series 700N and 7000. 1960. 4 pages. 8½ × 11. AIA No. 27-B.

MANUAL S. Description, application and specifications for Norton Closers designed for every type of school application. 1960. 4 pages. 8½ × 11. AIA No. 27-B.

NORTON CONDENSED CATALOG. Complete information including sizing charts for entire Norton line. 1960. 4 pages. 8½ × 11. AIA No. 27-B.

Overhead Door Corporation

ELECTRIC GARAGE DOOR OPERATOR for automatic opening and closing with radio controls within vehicles as well as push-button stations.

Pittsburgh Plate Glass Company, Glass Division

PITTCOMATIC—PITTCO HINGE. Pertinent facts on the nation's finest automatic Door Opener and the Quality Checking Floor Hinge. 1961. 8 pages. 8½ × 11. AIA No. 27-B.

Also see 63.

Sargent & Company

RECTANGULAR, SURFACE AND CONCEALED DOOR CLOSERS. Sargent's new rectangular style liquid door closers. Folder illustrates and discusses application and construction features. Includes quick guide to selection of proper closer size and series. Form DC7-12-59.

Also see 70.

Vonnegut Hardware Co., Von Duprin Division

GENERAL CATALOG. Catalog 59V with complete data, dimensions and functions on entire line of panic exit devices, auxiliary items and push and pull bars.

88 EXIT DEVICE. Folder, completely detailed, illustrating mortise lock and reversible rim and vertical rod devices. 4 pages.

66 EXIT DEVICE. Folder on this high quality stainless steel device in rim, mortise and vertical rods styles. Bulletin 581. 8 pages.

35. Door Frames

Kawneer, Co., see 29, 30, 34, 41, 44, 86, 135, 152, 153.

Pittsburgh Plate Glass Co., see 63.

36. Drains

Josam Manufacturing Company

CATALOG K. Plumbing drainage products. Illustrations, specifications, detailed drawings and installation diagrams. 1960. 8½ × 11. 236 pages. AIA No. 29-C.

FOLDER LV. "Leveleze" heavy duty floor and roof drains with adjustable top. Illustrations and specifications showing how adjustable top solves problems caused by variations in floor or roof levels. 1956. 8½ × 11. 6 pages. AIA No. 29c3.

FOLDER SF. "Super-Flo" floor drains; the latest development in floor drains giving greater flow (GPM), greater sanitation, greater interchangeability. Illustrations, specifications, dimensions, flow rate charts. 1956. 8½ × 11. 8 pages. AIA No. 29c.

MANUAL SK-2. Specifications and roughing-in dimensions on drains and chair carriers for every requirement, as a reference guide for field or office use. 1960. 5¼ × 6¾. 256 pages. AIA No. 29-C.

CATALOG SP-7. Illustrations, specifications and recommendations for supply inlets, overflow fittings, gutter drains, water level deck pool fittings, etc., and illustration diagrams of typical swimming pools. 1957. 8½ × 11. 26 pages. AIA No. 35-F-2.

PRICE LIST L. Easily identified sections including illustrations, roughing dimensions, applications, specifications and list prices of standard and optional features of every Josam Product. 8½ × 11. 144 pages. 1960. AIA 29c.

37. Electric Control Systems

Minneapolis-Honeywell Regulator Company

SURVEILLANCE ALARM SYSTEM (76-4452). Introduces new system that watches over critical equipment in large commercial buildings. Tells how it replaces intermittent and expensive manpower with constant automatic supervision. Describes a typical system for boiler equipment. Gives complete specifications. 1958. 2 color. 8½ × 11. 4 pages.

HONEYWELL ELECTRICAL SIGNALING AND CONTROL SYSTEMS (76-8410). Illustrates and explains ClockMaster Systems and specifications and Fire Detection and Alarm Systems and specifications. Discusses Light Saver Systems, Surveillance/Alarm Systems, Hotel/Motel Master, Hospital Master and Honeywell's field service operation. 1959. 2 color. 8½ × 11. 8 pages.

HONEYWELL ELECTRONIC SECURITY SYSTEM (76-8412). Illustrates and explains the functions, components and specifications of the system and highlights the savings and increased security provided by the system. 1960. 2 color. 8½ × 11. 8 pages.

SONO-SENTRY MOTION DETECTOR (76-8819). How intruder in guarded, unoccupied space betrays himself by moving and disturbing sound pattern. Typical applications. Equipment specifications. 1960. 8½ × 11. 2 color. 4 pages.

DOOR AND GATE CONTROL (76-8820). Describes system for remote monitoring and control of entrances. Specifications of basic equipment units. 1960. 8½ × 11. 3 color. 4 pages.

600 MILLION REASONS FOR AUGMENTED BUILDING SECURITY (76-4886). Emphasizes the fact that the annual cost to U. S. business from theft alone is $600,000,000. Explains how the Honeywell Security System can reduce theft and shows how one man can monitor the complete system. Illustrates hypothetical installation of Honeywell Security System. 1959. 2 color. 12 × 10¾. 4 pages.

Also see 6, 8, 38, 49, 71, 84.

38. Electric Products

Frank Adam Electric Company

SERVICE EQUIPMENT. Descriptions, Catalog numbers, sizes, capacity, and suggested specifications on Residential Service Entrance Equipment.

LOAD CENTERS. Circuit Breaker Type Load Centers and Service Equipment ranging from 1 to 42 branches available from 15 to 70 ampere branch circuits single or double pole.

LIGHTING PANELBOARDS. Dimensions, capacities, and catalog numbers of various Circuit Breaker, Switch and Fuse, and Fuse Only type of Panelboards with specifications.

DUST TIGHT PANELBOARDS. Description of and suggested application of "DUSTITE" circuit breaker panelboards.

DISTRIBUTION PANELBOARDS. Data on 250 and 600 volt service Standard Feeder Distribution Panelboards. Switch and fuse or circuit breaker types.

ENCLOSED SAFETY SWITCHES. Capacities, dimensions, weights, catalog numbers and technical descriptions on Enclosed Safety Switches, both indoor and rain tight.

BUSDUCT. Dimensions and typical installations of 250 to 1500 ampere Feeder and Plug-in Busduct and 600 to 4000 ampere High Efficiency Type Feeder Busduct.

WIRE AND CABLE DUCT. Listing and description of sections used in installing wire or cable duct in 2½" × 2½", 4" × 4" or 6" × 6" sizes.

MIDGET SIZE PLUG-IN BUSDUCT. Data on 5' or 10' sections of Midget size, 100 ampere capacity Plug-in Busduct with 30 ampere fused plug-ins, 2 pole, 3 pole, or 3 phase 4 wire.

FLOOR BOXES. Descriptions and Data on Floor Boxes, Fan Hangers and Clock Hangers.

STAGE AND AUDITORIUM LIGHTING CONTROL. Descriptions and illustrations of switchboards for control of stage and auditorium lighting in schools, theatters and auditoriums.

The Bryant Electric Company,
Westinghouse Electric Corporation

CIRCUIT BREAKER LOAD CENTER Catalog C-200. Illustrates and explains new line of circuit breaker load centers, featuring the new BR Duplex circuit breaker. Included are selector charts, wiring diagrams and enclosure dimensions. 20 pages. 8½ × 11.

Kawneer Co., *see 29, 30, 34, 41, 44, 86, 135, 152, 153.*

Minneapolis-Honeywell Regulator Company

ADVICE IN TIME: GIVE THOUGHT TO YOUR FOURTH DIMENSION (76-4872). Features the importance of coordinated time throughout business buildings. Discusses how Honeywell ClockMaster System regulates all clocks in a building from one master clock. 1959. 2 color. 8½ × 11. 4 pages.

THE NEW HONEYWELL DECORATOR CLOCK LINE OFFERS YOU TRULY STYLIZED, ACCURATE TIME (76-8608). Illustrates and describes distinctively styled line of secondary clocks available for use in Honeywell's "ClockMaster" time and program systems. 1960. 8½ × 11. 4 color. 8 pages. AIA File 31-i-24.

Also see 6, 8, 37, 49, 71, 84.

National Electrical Manufacturers Association

NEMA STANDARDS PUBLICATIONS. Listing of all currently available NEMA Standards Publications, including Standards for Motors and Generators, Industrial Control, Major Appliances, Electric Housewares, Transformers, Turbines. Wires and Cables, Wiring Devices, etc. 6 pages.

YOUR GUIDE TO NEMA STANDARDS PUBLICATIONS. Describes principal NEMA Standards Publications. 20 pages.

39. Electric Wiring

National Electrical Manufacturers Association

RIGID STEEL CONDUIT AND STEEL ELECTRICAL METALLIC TUBING HANDBOOK. Assembles in handy form suggestions on proper use of steel conduit and electrical metallic tubing, definitions and standards applicable to these wiring methods. Includes useful tables, extracts from National Electrical Code and American Standards relating to use of steel conduit and tubing. 32 pages.

AMERICAN STANDARD REQUIREMENTS FOR RESIDENTIAL WIRING. Guide to the electrical design of new and modernized homes for wiring adequacy. Covers location of outlets and switches, size and number of branch circuits, size of service entrance. Sample specification guide. ASA C91.1-1958. 32 pages.

40. Elevators

Westinghouse Electric Corporation, Elevator Division

WESTINGHOUSE ELEVATORS AND ELECTRIC STAIRWAYS. Gives general information on operatorless elevators, freight elevators, and electric stairways. 1960. 8½ × 11. 4 pages. B6116.

41. Entrances

American Art Metals Company

AMARLITE-ALUMINUM ENTRANCES. Catalog with illustrations, details and specifications for Amarlite Standard Doors and Frames, Panel Doors, Wide Stile Doors, Panic Exit Doors, Custom Entrances, Supplemental Hardware, Stock Shapes. 24 pages. AIA No. 16-E.

American-Saint Gobain Corp., *see 29, 63.*

Kawneer Company

THE SECOND NEW IDEA IN ENTRANCES. Comprehensive information and data on five different types of aluminum and stainless steel doors, full line of closer, and push-pull hardware options to handle all entrance requirements. AIA 16-E.

Also see 29, 30, 34, 44, 135, 152, 153.

42. Expanded Metals

Penn Metal Company, Incorporated

ARCHITECTURAL EXPANDED METAL MESHES. Describes new expanded metal patterns for refinishing exteriors of old buildings, for horizontal and vertical sunshades, stair and balcony railings, and for area dividers. Catalog includes table of sizes, weights and dimensions, photographs of patterns and drawings and descriptions of suggested applications. 8 pages.

Also see 61, 67, 82, 99, 113.

Expanded Metals continues—

Wheeling Corrugating Company, *see 2, 6, 19, 45, 53, 67, 82, 93, 99, 114, 118, 130.*

43. Expansion Joints

The Celotex Corporation

ARCHITECT SPEC. NO. 50, FLEXCELL BITUMINOUS FIBER EXPANSION JOINT FILLER. Product description, recommended uses, physical property data, specifications and details. 1961. 8½ × 11. 4 pages. AIA No. 4-E-11.

Also see 2, 74, 97, 113, 121, 148.

Penn Metal Company, Inc., *see 42, 61, 67, 82, 99, 113.*

44. Facing

American-Saint Gobain Corp., *see 29, 63.*

Kawneer Company

WALL FACINGS. Shows applications and specifications of Kawneer Zourite and Color Wall. AIA No. 15-M-1.

Also see 29, 30, 34, 41, 135, 152, 153.

Marble Institute of America, Inc., *see 89, 90.*

Mo-Sai Institute, Incorporated

MO–SAI . . . THE FACING WITH A FUTURE. This AIA—Producers' Council Certificate of Merit winner treats principal methods of anchoring prefinished Mo-Sai panels on a wide variety of building structures, including steel-frame, poured-in-place concrete, masonry back-up, etc. Also includes helpful data on texture and color selections in Mo-Sai. 2 colors. 8½ × 11. 16 pages.

MO–SAI ACROSS AMERICA. Full-color booklet shows Mo-Sai facing and curtain wall installations on buildings from Toronto, Canada to Los Angeles, California. 8 pages. AIA No. 4-K-1.

United States Plywood Corporation

WELDWOOD GLASWELD. Description and installation data. 8½ × 11. 12 pages. Form 2000.

45. Fastening, Anchors & Supports

Gregory Industries, Inc., Nelson Stud Welding Division

NELSON STUD WELDING IN CONSTRUCTION. Illustrations, details and specifications covering the use of Nelson end-welded fasteners for securing insulated aluminum sandwich walls, single skin metal walls and roofs, concrete anchors, shear connectors for bridges and buildings, insulation materials, electrical equipment, etc. 8½ × 11. 40 pages.

Independent Nail & Packing Company

SAMPLE BOARD OF STRONGHOLD LINE THREADED NAILS AND SPECIAL FASTENERS. Display board, 12 × 18", carrying actual samples of 50 different types of threaded and other improved nails for all types of applications.

REPORTS ON PERFORMANCE OF STRONGHOLD AND SCREW–TITE NAILS. Up-to-date binder of reports on fasteners and fastening techniques resulting from scientific laboratory testing at Wood Research Laboratory, Virginia Polytechnic Institute. Reports give test data, findings, comparison charts, etc., performance of Stronghold Annular Thread and Screw-Tite Spiral Thread Nails vs. conventional smooth shank nails and other fasteners; cover a wide variety of applications. 6 × 9. 200 pages.

LET'S NAIL DOWN SOME FACTS ABOUT THREADED NAILS. Diagrams of important features necessary to achieve maximum holding power in threaded nails, with data on types for varied applications. 8½ × 11. 4 pages.

GUIDE TO THREADED NAILS. Charts and diagrams showing various types of threaded nails, with specific application in light construction; chart of threaded nail specifications. 8½ × 11. 4 pages.

HOW TO BUILD NAILED TRUSSED RAFTERS. Complete nailing and stress diagrams, and instructions for the fabrication of W-Type and King-Post Type Nailed Trussed Rafters. 8½ × 11. 52 pages.

NAILING SCHEDULE FOR THREADED NAILS. Authoritative chart covering all major applications in building construction, based on studies at Wood Research Laboratory, Virginia Polytechnic Institute, as reported in VPI Bulletin # 38, Revised Edition. 16 × 20, printed one side.

IDEAS FOR USING ALL–NAILED KING–POST TRUSSED RAFTERS. New and practical ideas for employing this modern time-and-cost-saving technique in a wide variety of residential, farm, commercial, industrial and auxiliary structures. Profusely illustrated. 11 × 8½. 24 pages. AIA No. 19-B-3.

STRONGHOLD LINE NAILS IN SCHOOLS. Illustrations and detail drawings showing use of "Stronghold" and "Screw-Tite" Threaded Nails to achieve balanced strength of structure in modern, economical school buildings of wood construction. 11 × 8½. 12 pages. AIA No. 27-A.

CATALOG OF STRONGHOLD LINE NAILS. Complete technical data and information on 372 "most-used" sizes and types of "Stronghold," "Screw-Tite" and other improved nails, in regular and hardened steel, aluminum and other non-ferrous metals; in plain, hot galvanized, electroplated and special finishes including baked lacquer in colors; covering all applications in building industry. 8½ × 11. 24 pages and covers. AIA No. 27-A.

STRONGHOLD LINE BETTER FASTENINGS. Condensed catalog, 1960 Sweet's Architectural and Light Construction Files, illustrating and describing 37 types of "Stronghold Line" Threaded Nails engineered for improved fastening in building construction. 8½ × 11. 4 pages.

Ramset Fastening System, Winchester-Western Division, Olin Mathieson Chemical Corporation

POWDER–DRIVEN FASTENER HANDBOOK FOR ARCHITECTS AND ENGINEERS. Gives complete information on holding power, dimensions, limitations and uses of powder-driven fasteners. Copious charts and graphs showing how to determine holding power and how tension and lateral safety factors are determined. Includes complete section on approvals as well as field clearance requirements and limitations. Form B-124. 1960. 48 pages. AIA No. 17F.

SWEET'S FOLDER—RAMSET FASTENING SYSTEM. New illustrated general catalog lists full line of Ramset powder-actuated fastening tools, austempered drive pins, threaded studs; fastening charges, accessories; Shure-Set hammer-in fastening tools. Includes technical data, applications, approvals on powder-driven fasteners. Form B-141. 1960. 12 pages. AIA No. 17F.

HOW TO FIND THE RIGHT RAMSET FASTENER FOR ANY JOB. Shows exactly which fastener, powder load and tool to use for over 125 important applications. Contains full size illustration of every Ramset fastener with all dimensions. Form B-117. 1960. 20 pages.

PLUMBING APPLICATION MANUAL—RAMSET FASTENING SYSTEM. Shows how powder-driven fasteners are used to hang sprinkler pipe, water and waste lines. Includes detail drawings and fastener numbers for over 25 important applications. Form B-125. 1960. 8 pages.

Remington Arms Company, Inc., Division of DuPont, *see 108.*

Wheeling Corrugating Company

HOW TO USE LA BELLE CUT NAILS WHEN LAYING FLOORS. Instruction folder explaining use of modern La Belle Cut Nails. Suggestions on how tongue splitting can be avoided when laying tongue and groove flooring; gives the proper size and spacing to use when laying floors; plus other information on flooring and building block work. 4 pages.

LA BELLE CUT NAILS. Thorough descriptions of the many types, sizes and uses for La Belle Cut Nails. Booklet presents diagrams and other helpful information showing the proper application of Cut Nails for both flooring work and attaching furring strips to building blocks.

Also see 2, 6, 19, 53, 67, 82, 93, 99, 114, 118, 130.

46. Fences

California Redwood Association, *see 88.*

National Lumber Manufacturers Association

HOW TO BUILD WOOD FENCES. Guide to design, appropriate selection and construction of wood fences. Variety of typical installations shown. 2 colors. 8½ × 11. 16 pages.

47. Finishes, Porcelain Enamel

Kawneer Co., *see 29, 30, 34, 41, 44, 86, 135, 152, 153.*

48. Finishes, Wood

Georgia-Pacific

GEORGIA–PACIFIC EXTERIOR REDWOOD FINISH SPECIFICATIONS. 8½ × 11. Form H-18.

Hillyard Chemical Company

COMPLETE PRODUCT INFORMATION ON SEALS AND FINISHES FOR EVERY REQUIREMENT. Describes specialized finishes for particular uses. Gives coverage, complete architect spec's, long spec's for application. Illustrated.

National Lumber Manufacturers Association

HOW TO PAINT YOUR WOOD HOME. Manual on paints. painting and exterior home maintenance: how often to paint; estimating paint requirements; preparing wood surface; preventing blistering, peeling and other paint troubles; and proper house construction for satisfactory paint performance. 5½ × 8½. 2 colors. 22 pages. AIA No. 25-C-1.

National Paint, Varnish and Lacquer Association

Finishing Hardwood Floors.

United States Plywood Corporation

WOOD FINISHING WITH FIRZITE, SATINLAC AND SATINLAC LIGHTENER. Instructions on how to finish Weldwood plywood with Firzite and Satinlac. 8½ × 11. 8 pages. Form No. 2132.

Western Pine Association

FINE FINISHES SERIES. Six separate folders, each showing in full reproduced color different striking finishes as applied to Western Pine Region species. Folds to 3 × 6.

INSTALLING AND COLORING YOUR WALLS OF WOODS OF THE WESTERN PINE REGION. Detailed instructions on finishing. List of leading recommended paint, stain and surface finish manufacturers. Punched for ring-binder. 8½ × 11. 8 pages.

COLOR—BRIGHT NEW IDEA IN PANELING. Larch wall-chart indicating variety potential in using color on wood. 28 color finishes shown, including finisher's formulas for achieving them. 27 × 34, unfolded.

COLOR IDEAS AND HOW TO COLOR–FINISH WOOD. Full-color folder showing creative potential of use of color on wood in home and other interiors. Five specially designed interiors show result. 8 pages.

49. Fire Alarm Systems

Minneapolis-Honeywell Regulator Company

THEY AUTOMATICALLY LOOK TO YOU FOR COMPLETE PROTECTION (76-4809). Illustrates and discusses Honeywell Automatic Fire Alarm Systems. Gives specifications and highlights four-way safety: automatic detectors, manual stations, local alarm and automatic calling of fire department. 1959. 2 color. 8½ × 11. 4 pages. AIA No. 31-i-31.

HONEYWELL FIRE DETECTION AND ALARM SYSTEMS FOR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL BUILDINGS (76-3876). Emphasizes flexibility of Systems, dependable protection, and special features that may be added to a System. Highlights maintenance and service received with each System. 1958. 2 color. 8½ × 11. 2 pages.

FOUR "HOWEVERS" THAT COST A BILLION DOLLARS (76-4521). Emphasizes the importance of knowing exactly when a fire breaks out and exactly where it breaks out. Shows how Honeywell Fire Alarm System functions and how it supplements the building sprinkler systems. 1959. 4 color. 8½ × 11. 12 pages. AIA No. 31-i-31.

WHEN A FIRE IS BORN HONEYWELL'S SMOKE SENTRY IS FIRST TO SOUND THE ALARM (76-9006). Describes light-beam system that may be used alone to detect and announce presence of smoke; as advance fire detector, in complete fire alarm system, for critical areas; as safety fan-shutdown controller. Specifications of system components. 1961. 8½ × 11. 2 color. 4 pages.

Also see 6, 8, 37, 38, 71, 84.

50. Fire Retardant

Allied Chemical Corp., Barrett Div., *see 73, 97, 102, 109, 118, 121, 124, 142, 148.*

American-Saint Gobain Corporation, *see 29, 63.*

51. Fireproofing of Structural Steel

Indiana Limestone Institute, *see 2, 29, 53, 82, 85, 93, 114.*

Penn Metal Company, Inc., *see 42, 61, 67, 82, 99, 113.*

Vermiculite Institute, *see 147.*

Wheeling Corrugating Company, *see 2, 6, 19, 45, 53, 67, 82, 93, 99, 114, 118, 130.*

Zonolite Company

MONO–KOTE DIRECT–TO–STEEL FIREPROOFING. Technical data on new one-coat, monolithic fireproofing treatment. Description of material, its properties, line drawings, and short form specifications. PA-53. 1959. 2 pages. 8½ × 11. AIA No. 21-G.

ZONOLITE PLASTER AND ACOUSTICAL SYSTEMS. Summary of fire tests, principle applications of Zonolite Plaster and Zonolite Acoustical Products. PA-56. 1960. 8 pages. 8½ × 11. AIA No. 21-A-5 and 39-B.

52. Flashing

Allied Chemical Corp., Barrett Div., *see 73, 97, 102, 109, 118, 121, 124, 142, 148.*

The Dow Chemical Company, Plastic Sales Department

SARALOY 400 ELASTIC FLASHING (Form No. 157-20). Installation data and specifications for industrial and residential applications. 8½ × 11. 8 pages. AIA No. 12-H.

Indiana Limestone Institute, *see 2, 29, 53, 82, 85, 93, 114.*

Johns-Manville Sales Corporation

ASBESTILE FLASHINGS. Description and specifications for this flashing system using asbestos felts and Asbestile, a heavy-bodied plastic cement reinforced with asbestos fiber. 1961. 8½ × 11. 4 pages.

Wheeling Corrugating Company, *see 2, 6, 19, 45, 67, 82, 93, 99, 114, 118, 130.*

53. Floor Construction Systems

Fenestra Incorporated

METAL FLOOR AND ROOF DECK. Technical catalog furnishes specific engineering and erection data on standard "D" panels; Electrifloor with 100% raceway system Holorib reinforcing floor forms for concrete construction; Elect-Re-form for Electrification and reinforcing floor form construction.

Granco Steel Products Company

COFAR & E/R COFAR. Catalog BC-602. Detailed information on deep-corrugated, high strength galvanized Cofar (transverse wires welded to each corrugation to provide temperature reinforcing and mechanical anchorage) and E/R COFAR (cellular unit of 1, 2, or 3 cells) that blends with regular Cofar for complete electrification of concrete floor slabs.

TUFCOR. Catalog BFg-594. Gives information on uses, selection, etc. of Tufcor, designed for longer spans and heavy load conditions. Tufcor requires no temporary supports.

CORRUFORM. Catalog BFg-594. Information on tough-tempered steel base for short and intermediate spans. Sheet provides safe working platform. Slab can be cast and finished in one operation.

Indiana Limestone Institute

RIBFORM. Catalog 245.

CELLUFLOR. Catalog 270.

Also see 2, 29, 82, 85, 93, 114.

Floor Construction Systems continues—

Inland Steel Products Company

INLAND CELLUFLOR. Catalog No. 270. Describes Inland Celluflor, panel which serves as structural sub-floor and provides cellular raceways for in-floor electrification and communication. Includes load tables, section properties, construction and installation details, fireproofing methods, and specification data. Typical applications shown. 8½ × 11. 16 pages. AIA No. 13-H.

INLAND RIBFORM. Catalog No. 245. Describes Inland Ribform, permanent steel form for concrete floor and roof slabs. Fabricated from high tensile steel in lengths to meet job requirements in Standard, Heavy-Duty, and Super-Duty weights, either black (uncoated) or with a galvanized steel finish. Erection is quick, easy and requires no special tools or skills. 8½ × 11. 4 pages. AIA No. 4-D-2.

National Lumber Manufacturers Association

THE CASE OF THE JAIL–HOUSE FLOOR. Compares factors of personal comfort, maintenance and economy of wood-joisted vs concrete-slab-on-grade floor construction in homes. 1959. 2 colors. 6 × 9. 4 pages.

National Terrazzo and Mosaic Association, *see 141.*

Portland Cement Association

HOW TO DESIGN AND BUILD LOW COST CONCRETE BLOCK JOIST FLOORS FOR RESIDENTIAL AND OTHER LIGHT OCCUPANCY BUILDINGS. Describes method of design and construction using concrete block as fillers for concrete floors in residential and other light occupancy buildings. Includes: allowable load tables for both plain and soffit-type block. Explains step-by-step methods for erecting forms, placing block, reinforcement and concrete. Line drawings and photographs. 8½ × 11. 16 pages.

PRECAST CONCRETE JOISTS IN FLOOR AND ROOF CONSTRUCTION. Provides technical information on precast concrete joists; includes design tables and construction details; illustrates steps in building a precast concrete joist floor. Illustrated. 8½ × 11. 24 pages.

Stran-Steel Corporation

NAILABLE STEEL JOIST, light weight plus strength. Complete design data and properties. 24 pages. Sweet's Catalog File 13-G.

STEEL ROOF DECK with tight cell, standard or wide rib panels in 18, 20 and 22 gage. Complete properties and load tables. Sweet's Catalog File 13-G.

Unistrut Products Company

MET–L–STRUT FLOORINGS SYSTEMS BULLETIN # 212. New system of floor construction for data processing rooms and similar applications. Includes photos of construction-in-progress and completed installations. Shows UNISTRUT grid-work on adjustable jacks and fully describes removable floor panels. 1960. 8½ × 11. 4 pages.

Vermiculite Institute, *see 147.*

Wheeling Corrugating Company

WHEELING TENSILFORM. Introduces new, stronger Tensilform, high strength steel base for concrete floor and roof slabs with minimum yield strengths in the 80,000–105,000 psi range. Describes three types of Tensilform for use with sand and stone concrete as well as with lightweight aggregate concrete and cement fills. Load tables; physical properties; an easy to use deflection chart; welding and clipping patterns; and suggested architectural specifications are included with other buying information. WC-250. 1960. 2 colors. 8 pages. AIA No. 13-G.

Also see 2, 6, 19, 45, 67, 82, 93, 99, 114, 118, 130.

54. Floor Machines

Hillyard Chemical Company

"GOES ANYWHERE—DOES ANY JOB." Describes single brush Hil-Boy scrubbing, polishing and burnishing machine. Complete specifications of motor and design features emphasize extreme low silhouette made possible by a specially designed General Electric motor. Shows new features; 17" and 21" models. Photographs. 8 pages.

Multi-Clean Products, Incorporated

BETTER FLOOR CARE. (Form 1561). Describes complete Multi-Clean line of Floor Machines and Scrubbing Machines. Gives information helpful in selecting right size and model to do the job. Describes Multi-Clean Vacuum Cleaners and Floor Waxes, Cleaners, Sealers. Illustrated. 8 pages.

55. Floor Maintenance Systems

Armstrong Cork Company

THE EASY WAY TO CARE FOR ARMSTRONG FLOORS IN COMMERCIAL AREAS. Contains maintenance information, stain removal chart, furniture rest chart, and lists complete line of floor care products for commercial areas. 8½ × 11. 4 pages. AIA No. 23-G.

Also see 2, 58, 77, 114, 116, 149.

E. L. Bruce Co., *see 57, 58, 138.*

Multi-Clean Products, Incorporated

COMPLETE SPECIFICATIONS OF FLOOR TREATMENTS. Suggested specifications for scientific Multi-Clean Method for initial treatment of asphalt tile, concrete, linoleum, rubber tile, vinyl and vinyl asbestos, terrazzo, wood, and all other common type floors. Long and short specification forms on perforated sheets, ready to tear out and use. Specifications for restoring appearance of old floors. 70 pages.

MULTI–CLEAN METHOD FOR MAINTAINING TERRAZZO OR OXYCHLORIDE FLOORS (Form 1405). Describes scientific Multi-Clean Method for initial treatment of Terrazzo or Oxychloride floors, including materials, equipment, and technique. Includes step-by-step instructions for low cost maintenance and restoring brilliance to old Terrazzo or Oxychloride.

MULTI–CLEAN METHOD FOR MAINTAINING ASPHALT TILE FLOORS. (Form 1401). Describes scientific Multi-Clean Method for initial treatment of asphalt tile floors, including materials, equipment, and technique. Includes step-by-step instructions for low cost daily maintenance and restoration of old asphalt tile.

MULTI–CLEAN METHOD FOR MAINTAINING RUBBER TILE FLOORS (Form 1402). Describes scientific Multi-Clean Method for initial treatment of rubber tile, including materials, equipment, and technique. Includes step-by-step instructions for low cost maintenance and restoration of old rubber tile floors.

MULTI–CLEAN METHOD FOR MAINTAINING VINYL TILE FLOORS (Form 1403). Describes scientific Multi-Clean Method of initial treatment of vinyl and vinyl asbestos tile floors, including materials, equipment, and technique. Includes step-by-step instructions for low cost maintenance and restoration of old vinyl floors.

THE MULTI–CLEAN METHOD FOR TREATMENT OF: ASPHALT TILE FLOORS (Form 1401) . . . RUBBER TILE FLOORS (Form 1402) . . . VINYL AND VINYL ASBESTOS FLOORS (Form 1403) . . . CONCRETE FLOORS (Form 1404) . . . TERRAZZO AND OXYCHLORIDE FLOORS (Form 1405). Series of 4 page folders describes materials, equipment, and step-by-step instructions for initial treatment, daily maintenance, and restoration of floors. Illustrated.

MULTI–CLEAN METHOD FOR MAINTAINING CONCRETE FLOORS (Form 1404). Describes scientific Multi-Clean Method for initial treatment of concrete floors, including materials, equipment, and technique. Includes step-by-step instructions for hardening and etching, sealing, future maintenance, and treatment of old concrete floors.

MULTI–CLEAN METHOD FOR GYM FLOORS (Form 1400). Describes scientific Multi-Clean Method for initial treatment of gymnasium floors including step-by-step instructions for sanding, sealing, finishing, and painting in game markings; also restoration and re-finishing old gym floors as well as routine maintenance. Includes materials, equipment, and technique.

National Terrazzo and Mosaic Association, *see 141.*

56. Floor Patching and Repairing

The Dow Chemical Company, Plastics Sales Department

LATEX (560) MODIFIED PCM. (Form No. 151-56). For repairing concrete floors.

The Tremco Manufacturing Company

TREMCO MULSOMASTIC FLOORING. AIA No. 23-D.

NEW TREMCO DURATREM FLOORING. AIA No. 23-G.

TREMCO IRON COMPOUND. AIA No. 7-A-3.

57. Floor Treatment Materials

E. L. Bruce Company, Household Products Division

HOW TO FINISH AND MAINTAIN HARDWOOD FLOORS (KEY 8). Complete instructions for finishing or refinishing old or new floors and proper care and cleaning. 8½ × 11. 2 pages.

GYM FLOOR FINISHING INSTRUCTIONS (KEY 84). Complete instructions for sanding and finishing all gymnasium and similar floors. 8½ × 11.

Also see 58, 138.

Hillyard Chemical Company

SPECIFICATION FILES FOR PROPER TREATMENT OF ALL TYPES OF FLOORS. Individual files contain architects' specification and long form contractor's "how to apply" specs. Fully illustrated step by step procedures. Designed so that the architect may attach to specifications for contractor or painters to follow. Files give treatment procedures and recommend Hillyard products for each type floor. Same size as standard file folders. Revised and reprinted. 1960. AIA No. 25-G.—HOW TO TREAT AND MAINTAIN CONCRETE FLOORS. . . . HOW TO TREAT AND MAINTAIN TERRAZZO FLOORS. . . . HOW TO TREAT AND MAINTAIN RESILIENT FLOORS (*Asphalt Tile, Rubber Tile and Vinyl*). . . . HOW TO TREAT AND MAINTAIN WOOD FLOORS. . . . HOW TO TREAT AND MAINTAIN GYM FLOORS. . . . HOW TO TREAT AND MAINTAIN CLAY TILE.

SWEET'S FILE ARCHITECTURAL CATALOG. Covers specifications and information on Hillyard products for the treatment of all types of floors. 1960. 8½ × 11. 4 pages. AIA No. 13-M-1.

PROPER MAINTENANCE FOR CONDUCTIVE FLOORS. Outlines method and products used to safely maintain conductivity to keep a grounded floor safe. Hillyard products described in this file are especially formulated for cleaning of conductive floors as specified and described in "Safe Practices for Hospital Operating Rooms" N.F.P.A. No. 56. Listed by Underwriters' Laboratory "Relating to hazardous locations." Give tests by Independent Testing Laboratories.

The Tremco Manufacturing Company

TREMCO LOW COST INDUSTRIAL FLOOR MAINTENANCE AIA No. 25-G.

TREMCO TREMSEAL. For concrete and wood. AIA No. 3-B-1; 25-G.

TREMCO TREMSEAL—20. NEW SEAL FOR NEW CONCRETE FLOORS. AIA No. 25-G.

TREMCO TREMCRETE. AIA No. 3-B-1.

Vermont Marble Company, Vermarco Supply Co. Division

EPOXY TRU-TREAD. A nonslip material for all types of stairs and walkways. Brochure describes complete applications. 2½ × 11. 4 pages.

58. Flooring

American Olean Tile Company, *see 21.*

Armstrong Cork Company

GUIDE TO ARMSTRONG FLOORS, WALLS, AND COUNTER TOPS. Color plates show full color line, description, technical data and specifications of Armstrong Linoleum, Vinyl Corlon Sheet Plastic Floorings, Asphalt Tile, Excelon (Vinyl-Asbestos) Tile, Linotile, Rubber Tile, Custom Corlon Tile, Opalesq Vinyl Tile, Cork Tile, Custom Vinyl Cork Tile, and Counter Corlon for walls and counters. Sweet's Catalog Insert, 1961–62. 8½ × 11. 24 pages. AIA No. 23-G.

RESILIENT FLOORS: TECHNICAL INFORMATION FOR ARCHITECTS. Brief articles on technical factors involved in the specification, installation, and maintenance of all types of resilient flooring. 1961–62. 8½ × 11. 54 pages. AIA No. 23-G.

ARMSTRONG RESILIENT FLOOR SPECIFICATIONS. Individual Unabridged Architect's Specifications for the specifying and installation of Armstrong's Linoleum, Vinyl Corlon Sheet Plastic Floorings, Asphalt Tile, Excelon (Vinyl-Asbestos) Tile, Linotile, Rubber Tile, Custom Corlon Tile, Cork Tile, Custom Vinyl Cork Tile, and Counter Corlon for walls and counters. Latest editions. 8½ × 11. AIA No. 23-G.

A PORTFOLIO OF MID-TWENTIETH CENTURY ARCHITECTURAL INTERIORS—WITH COMMENTS BY VITRUVIUS. Brochure containing a 16-page collection of views of important new buildings in full color. Quotations from Vitruvius' "The Ten Books on Architecture" suggest that, while there are always new architectural functions and forms, certain precepts and truths are inherent to good architecture in any period. 9½ × 12¼. AIA No. 23-G.

Also see 2, 55, 77, 114, 116, 149.

Asphalt and Vinyl Asbestos Tile Institute

INSTALLATION SPECIFICATIONS FOR VINYL ASBESTOS TILE AND ASPHALT TILE FLOORING. Recommended specifications for the installation of vinyl asbestos tile and asphalt tile flooring. 8½ × 11. 4 pages. AIA No. 23-G.

MAINTENANCE OF VINYL ASBESTOS TILE AND ASPHALT TILE FLOORS. Recommendations for cleaning and waxing vinyl asbestos tile and asphalt tile floors in institutions, public buildings and commercial areas. 8½ × 11. 4 pages. AIA No. 23-G.

ASPHALT TILE COLOR CLASSIFICATION CHART. Color comparison chart shows commercial equivalents of the various manufacturers' color lines which give the same general tone or effect. 8½ × 11. 4 pages. AIA No. 23-G.

MAINTENANCE OF VINYL ASBESTOS TILE FLOORS. Recommendations for cleaning and waxing vinyl asbestos tile floors. 3½ × 6. 6 pages.

VINYL ASBESTOS TILE COLOR CLASSIFICATION CHART. Color comparison chart that shows commercial equivalents of the various manufacturers' color lines which give the same general tone or effect. 8½ × 11. 4 pages. AIA No. 23-G.

PROPER FLOOR PROTECTION DEVICES FOR USE ON HOSPITAL AND SCHOOL EQUIPMENT. Gives recommended sizes of casters, gliders and furniture cups for hospital and school furniture and equipment where asphalt tile or vinyl plastic asbestos tile flooring is used 8½ × 11. 4 pages. AIA No. 23-G.

SPECIFICATION FOR ASPHALT TILE. Recommended specification for the physical properties of asphalt tile flooring. 8½ × 11. 10 pages.

SPECIFICATION FOR GREASE RESISTANT ASPHALT TILE. Recommended specification for the physical properties of grease resistant tile flooring. 8½ × 11. 4 pages.

SPECIFICATION FOR VINYL ASBESTOS TILE. Recommended specification for the physical properties of vinyl asbestos tile flooring. 8½ × 11. 14 pages.

Azrock Floor Products Division, Uvalde Rock Asphalt Company

AZROCK LINE CATALOG (Sweet's Catalog Insert). Color plates show full color line, descriptions, technical data and specifications of Vina-Lux vinyl asbestos tile and Azrock asphalt tile. 8½ × 11. 12 pages. AIA No. 23-G.

AZROCK FLOOR PRODUCTS INSTALLATION MANUAL. Complete information with illustrations on where and how to install Azrock Floor Products over various types of sub-floors. 8½ × 11. 28 pages.

ARCHITECTS FILE FOLDER. Includes various technical articles on light reflectance characteristics of resilient tile, individual detailed architects specifications for the specifying and installing of Azrock floors, and other factual information on resilient flooring.

VINA-LUX FLOOR STYLING HANDBOOK. Presents ideas for decorating with Vina-Lux vinyl asbestos tile. Includes styles, patterns, suggested floor designs, sizes, thicknesses, special characteristics. Special section shows how to design floors for problem rooms.

E. L. Bruce Company, Flooring Division

SWEET'S CATALOG INSERT (KEY 47). Full color catalog showing all Bruce Hardwood Floorings (prefinished and unfinished). Complete technical data, architects' specifications. 1961. 8½ × 11. 12 pages.

HOW TO INSTALL STRIP HARDWOOD FLOORING (KEY K). Instructions on proper installation of prefinished and unfinished strip hardwood flooring. 1959. 3⅝ × 6¼. 4 pages.

Flooring continues—

INSTALLATION INSTRUCTIONS—PLANK FLOORING (KEY 48). Technical installation instructions for laying random width plank flooring. 1956. 4×8½. Card printed both sides.

BRUCE DURA-WOOD BLOCK FLOORS (KEY 104). Technical and descriptive data on heavy duty industrial block floors for use over concrete. 1959. 8½×11. 4 pages.

HOW TO FINISH AND MAINTAIN WOOD FLOORS. How to finish and care for hardwood and softwood floors using the Bruce penetrating and seal method. 1959. 8½×11. Single sheet.

BRUCE HARDWOOD FLOORS (KEY 87). Color booklet pictures and describes Bruce Strip Floors, Bruce Block Floors, Bruce Ranch Plank Floors, Bruce Fireside Plank Floors, Bruce Laminated Oak Block Floors, Bruce Random-Width Plank Floors and Bruce Blendwood Block Floors. 8½×11. 12 pages.

INSTALLATION MANUAL FOR BRUCE BLOCK FLOORS (KEY 3). Technical information on proper installation of Bruce Block Flooring over wood and concrete subfloors. 1959. 8½×11. 12 pages.

Also see 57, 138.

Congoleum-Nairn Incorporated

FACTS & DATA ON RESILIENT FLOORS. Facts and data on resilient floors; wire bound booklet detailing all important factors in selecting correct resilient floor and wall coverings; also included: product and installation specs, underfloor preparation, tables of properties maintenance data. 46 pages.

INSTALLATION SPECIFICATIONS. Individual specifications for the installation of Congoleum-Nairn's Inlaid Linoleum, Linoleum Tile, Static Conductive Linoleum, Nairon Custom Tile, Wonderflor Tile, Flor-Ever Vinyls, Vinylbest Tile, Asphalt Tile and Bulletin Board Cork. Latest edition.

FLOR-EVER INLAID VINYLS. Colors, product information and recommended uses for Showcase, Cosmopolitan, Concept '70, Americana and Westernaire sheet vinyls.

Dodge Cork Company

SWEET'S CATALOG INSERT. Color plates show full color line; descriptions, technical data, and specifications of Dodge Siboney Vinyl, SG Cork, Standard Cork, Vinylwood Cork Tile, Panelcork, and Cork Brick wall material. Latest edition. 8 pages. AIA No. 23-G.

Johns-Manville Sales Corporation

JOHNS-MANVILLE TERRAFLEX VINYL ASBESTOS FLOOR TILE. Color chart, design suggestions and description of J-M Terraflex vinyl asbestos floor-tile, cove base and feature strips. 1959. 8½×11. 8 pages.

JOHNS-MANVILLE ASPHALT ASBESTOS TILE. Color chart and descriptive information on this durable flooring for home and business. 1959. 8½×11. 4 pages.

JOHNS-MANVILLE SOLID VINYL FLOOR TILE. Color chart, full color illustration of uses and description of this flooring for residential or commercial use. 1960. 8½×11. 4 pages.

Kentile, Incorporated

COLOR CATALOG. Complete color line and specifications of Kentile Floors; Asphalt Tile, Vinyl Asbestos Tile, Solid Vinyl Tile, Crystalite Vinyl Tile, Rubber Tile and Custom Cork Tile. 8½×11. 20 pages. AIA No. 23-G.

KENTILE FLOORS WORKBOOK FOR ARCHITECTS AND BUILDERS. Contains complete installation methods, technical data, descriptions and applications for all Kentile products. 8½×11. 48 pages. AIA No. 23-G.

Marble Institute of America, Inc., *see 89, 90.*

The Mosaic Tile Co., *see 21.*

National Oak Flooring Mfrs. Association

ARCHITECTS SPECIFICATION MANUAL. Preparation, laying, finishing and maintenance of hardwood floors. 1955. 8½×11. 11 pages.

National Terrazzo and Mosaic Association, *see 141.*

Vermont Marble Co., *see 3, 29, 66, 89, 90, 117, 120, 142.*

Wheeling Corrugating Company, *see 2, 6, 19, 45, 53, 67, 82, 93, 99, 114, 118, 130.*

59. Flooring Underlay

Azrock Floor Products Division, Uvalde Rock Asphalt Company, *see 58.*

Dodge Cork Company

FLYER AND DATA SHEETS show advantages of cork composition underlay for hardwood flooring and evaluation of various types of underlay.

Georgia-Pacific

GEORGIA-PACIFIC HARDBOARDS. Complete specifications including data on .215" underlayment for residential and commercial floor coverings. 8½×11. 8 pages. Form #HB-16.

60. Framing, Concrete

Portland Cement Association

CONTINUITY IN CONCRETE BUILDING FRAMES. Presents analysis of building frames of reinforced concrete subject to either vertical or horizontal load-wind pressure and earthquake. Quick, easy, and convenient procedures suitable for office design practice, illustrated by many numerical problems. Illustrated. 6×9. 56 pages.

61. Framing, Metal

Penn Metal Company, Incorporated

PENMETAL LIGHTSTEEL STRUCTURAL SECTIONS. Components include a complete range of studs, joists, track and bridging for custom steel framing of schools, hospitals, houses, light industrial and commercial structures, load-bearing partitions and exterior curtain wall framing. The sections are fabricated from structural grade, strip steel by cold forming and are designed specifically for strength, light weight and low cost. The LIGHT-STEEL nailing groove permits easy and economical attachment of collateral materials. Catalog features descriptions of the sections, specifications, dimensions, physical and structural properties, and tables giving uniform load for joists, maximum allowable axial loads for studs, etc. 24 pages.

TECHNICAL MANUAL ILLUSTRATING METHODS OF APPLYING COLLATERAL MATERIALS to Penmetal LIGHT-STEEL structural sections. Designed to provide a complete and economical system of steel framing for the light building field, these sections offer all the advantages inherent in steel and, in addition, are scientifically engineered for low-cost fabrication and erection. Joists, studs, track and bridging are designed to fit together for ease of assembly and welding. Because of their light weight, complete wall units can be readily trucked to the job site where they can be erected in a few minutes. Isometric drawings in the manual show application of collateral materials for interior and exterior wall, floor, roof and ceiling constructions. Typical partition, door and window details, as well as vapor barrier and thermo-insulation applications are also shown.

HIGH-TENSILE PENN-ZEE SECTIONS. Gives physical and structural properties, standards and manufacture of Penn-Zee sections. 8½×11. 4 pages. AIA No. 13-G.

LIGHTSTEEL FOR SCHOOL CONSTRUCTION. Describes cost, manufacture, and use for Lightsteel in construction. 8½×11. 22 pages. AIA No. 13-G.

Also see 42, 67, 82, 99, 113.

Stran-Steel Corporation

LIGHT WEIGHT STRUCTURAL SECTIONS, including nailable steel studs and joist, channel and bridging. Complete design examples, dimensions and properties for designing industrial and commercial structures of all types. Features lower foundation costs, quick attachment of collaterals, simplicity of design and rapid construction. Sweet's Catalog File 13-G.

PUNCHED CHANNEL STUDS specifically designed stronger to provide high load bearing capabilities without sacrificing low cost or light weight. Complete design examples for spandrel wall, exterior curtain wall, exterior and interior load bearing walls, high bay partitions, non-bearing partitions and four-hour wall. Dimensions and properties. 6 pages.

Unistrut Products Company

NO. S-5 UNISTRUT METAL FRAMING FOLDER. Illustrates

system and its components; shows photos typical of the endless applications of the system. 1958. 3¼ × 6⅓. 16 pages.

NO. 301 ULTRA CLEAN ROOMS. Covers the use of metal framing for construction of ultra clean rooms for precision manufacturing, assembly and laboratory areas. 1959. 8½ × 11. 4 pages.

NO. 810 POCKET SIZE PARTS CATALOG. Complete parts catalog with drawings, description, weights, and other pertinent data for all standard UNISTRUT channels, fittings, and parts. 1958. 4 3/16 × 5½. 152 pages. AIA No. 14-G.

NO. 710 CONSTRUCTION AND MAINTENANCE HANDBOOK. Complete catalog on the UNISTRUT framing system as used in the construction, maintenance, electrical and mechanical fields. Fully illustrated. Application information on typical channels, fittings and basic engineering information. 1960. 8½ × 11. 36 pages. AIA No. 14-G.

62. Framing, Wood

National Lumber Manufacturers Association

MANUAL FOR HOUSE FRAMING. (No. 1 in Wood Construction Data series.) Describes and shows proper methods of fabricating and using lumber in residential construction. Provides pertinent information on construction features which contribute to the satisfactory performance of lumber. Numerous detail drawings make this a helpful reference for practicing and student architects, builders and building officials. 1959. 2 colors. 8½ × 11. 42 pages. AIA No. 19-B.

PLANK–AND–BEAM FRAMING FOR RESIDENTIAL BUILDINGS. (No. 4 in Wood Construction Data series.) Tells and shows, with detail drawings, how to apply the plank-and-beam method for framing floors and roofs in residential construction. Provides comprehensive information on the principles of design, advantages and limitations, construction details and structural requirements for using this wood framing method in modern homes. 1960. 8½ × 11. 2 colors. 32 pages. AIA No. 19-B.

NATIONAL DESIGN SPECIFICATION FOR STRESS–GRADE LUMBER AND ITS FASTENINGS. 1960 Edition of nationally recognized design standard for wood construction. Covers allowable stresses; design formulas; bolts, lag screws, nails and other timber connectors; glued laminated lumber and related information. 8½ × 11. 64 pages. AIA No. 19-B-1.

HEAVY TIMBER CONSTRUCTION DETAILS. (No. 5 in Wood Construction Data series.) Defines this increasingly popular type of construction in a manner acceptable for direct incorporation into building codes. Provides important framing and fastening details for designer, engineer and contractor. 1960. 2 colors. 28 pages. 8½ × 11. AIA No. 19-B.

WOOD–FRAMED STRUCTURES RESIST HURRICANES. Discusses and shows wood-framed structures, on Florida Keys in path of Hurricane Donna, that survived and demonstrated remarkable resistance to terrific forces of high winds and water. 1960. 4 pages. 8½ × 11.

FAMILY FALLOUT SHELTERS OF WOOD. Provides detail plans and specifications which enable home handyman to build wood shelter, above ground or underground. Plans prepared with cooperation of the Office of Civil Defense Mobilization, which has reprinted the booklet for wide distribution, 1960. 12 pages. 8½ × 11.

Timber Structures, Incorporated

TSG–26 GENERAL CATALOG. Complete catalog on use of glued laminated structural members in modern construction. Contains illustrations, dimensional data, section property tables; specifications for arches, trusses, beams, rigid frames, domes, and heavy timber roof decking. 1961. 8½ × 11. 24 pages. AIA No. 19-B-3.

TSG–28 CHURCH CONSTRUCTION WITH ENGINEERED TIMBERS. Illustrations, descriptive matter, technical design data, and specifications for glued laminated arches, trusses, beams, rigid frames, domes and heavy timber decking used in structural framing for churches. 1960. 8½ × 11. 12 pages. AIA No. 19-B-3.

TSG–27 SCHOOL CONSTRUCTION WITH ENGINEERED TIMBERS. Illustrations, descriptive matter, technical design data, and specifications for glued laminated arches, trusses, beams, rigid frames, domes and heavy timber decking used in structural framing for schools. 1960. 8½ × 11. 16 pages. AIA No. 19-B-3.

TSG–23 TIM–DECK HEAVY TIMBER DECKING. Illustrations, descriptive matter, application drawings, span tables, insulative information, and specifications for heavy timber decking. 1958. 8½ × 11. 8 pages. AIA No. 19-B-3.

TSG–12. HOMES OF PERMANENCE AND BEAUTY. Illustrations, descriptive matter, application drawings, typical beam sizes and specifications covering glued laminated beams and heavy timber decking for residential use. 1958. 8½ × 11. 8 pages. AIA No. 19-B-3.

63. Glass

American-Saint Gobain Corporation

GLASS PRODUCTS. Descriptions of Plate, Sheet and Rolled Glass Products, with illustrations and tabular listings of properties. 24 pages. 8½ × 11. AIA No. 26-A.

SECURIT GLASS DOORS. Describes and illustrates line of translucent glass doors; complete tabulation of various hardware functions, models and sizes. 8 pages. 8½ × 11. AIA No. 16-N.

Also see 29.

Libbey-Owens-Ford Glass Company

HOW TO GET NATURE–QUALITY LIGHT FOR SCHOOL CHILDREN. Use of large areas of flat, transparent glass for best results in school room daylighting. 1957. 8½ × 11. 24 pages.

THERMOPANE MANUAL. Technical data on Thermopane insulating glass. 1961. 8½ × 11. 16 pages. AIA No. 26-A.

TRANSPARENT MIRRORS AND FRONT SURFACE MIRRORS. Describes composition of Mirropane and gives suggested uses, size limitations, how to install for proper use. 1958. 8½ × 11. 4 pages.

GLASS FOR CONSTRUCTION. Condensed information on all products pertaining to construction. 1960. 8½ × 11. 32 pages. AIA No. 26-A.

HOW TO REDUCE GLARE, BRIGHTNESS AND SOLAR HEAT. Tells how Heat Absorbing and Parallel-O-Grey polished plate glass and heat absorbing Thermopane reduce solar heat gain, help save air-conditioning costs. 1961. 8½ × 11. 4 pages.

TUF–FLEX GLASS DOORS. Technical information including types, sizes, fittings and hardware. 1960. 8½ × 11. 12 pages.

PREDICTING DAYLIGHT AS INTERIOR ILLUMINATION. SMU 10-yr. study to help architects and illuminating engineers plan for maximum physical, psychological and economic use of abundant natural illumination. 1960. 28 pages. 50¢.

VITROLUX CURTAIN WALL GLASS. Features, uses and technical data on spandrel glass for single or multi-story buildings. 1960. 8½ × 11. 16 pages.

Also see 29, 30, 33, 135, 153.

Pittsburgh Plate Glass Company

CARARRA COLORFUL STRUCTURAL GLASS. Details and illustrations on toilet room compartments. The ten Cararra colors are shown on color chips. Suggested specification data is given for both interior and exterior work. 8½ × 11. 8 pages. 1961. AIA No. 26-A-5.

"PITTSBURGH DOORWAYS." Detailed drawings and dimensions of various styles of Pittsburgh Doorways and Herculite Doors. 1961. 8½ × 11. 24 pages. AIA No. 16-N.

PITTSBURGH GLASS PRODUCTS. General information about complete line of Pittsburgh products. 1961. 8½ × 11. 20 pages. AIA No. 26-A-2.

PITTCO STORE FRONT METAL. Details and specifications. 1961. 8½ × 11. 16 pages. AIA No. 26-D.

ARCHITECTURAL SPECIFICATIONS. Paint specifications. 1961. 8½ × 11. 24 pages. AIA No. 25-B-2.

PITTSBURGH GLASS–CLAD CURTAIN WALL SYSTEMS. Describes 82-X framing, CARARRA, FIBER GLASS and SPANDRELITE for curtain wall construction. 1961. 8 pages. AIA No. 17A.

ARCHITECTURAL DATA HANDBOOK. Pertinent facts on the complete line of Pittsburgh Glass, Metal and Paint Products. 4½ × 7. 121 pages.

TWINDOW. Describes two types of twin glass insulation for residential construction. 8½ × 11. 8 pages. AIA No. 19-E-11.

64. Glazing

National Paint, Varnish & Lacquer Association

FACTS ABOUT GLAZING. Circular 735.

Pittsburgh Plate Glass Co., *see 63.*

65. Glazing Compounds

DAP inc.

GENERAL CATALOG. Covers all DAP Glazing, Caulking, Sealing Products. 8½ × 11. 26 pages.

SWEET'S INSERT. Covering DAP Caulking, Glazing, Sealing Products with specification information and including information about DAP Technical Service Program for architects.

DATA SHEETS. Describe DAP Flexiseal Liquid Polymer Compounds with Thiokol base. 8½ × 11. 7 pages.

The Tremco Mfg. Co.

NEW TREMGLAZE WITH TREMTHOL. 1961 glazing specifications for vision glass for aluminum sash, insulation glass in aluminum sash, steel sash and wood sash. Self contained brochure contains information to provide a sound basis for the evaluation of all significant factors bearing on the requirements of the glazing sealants to be used on any given job, to insure adequate security of performance at minimum cost. 8½ × 11. 12 pages. AIA No. 26-B-2.

66. Granite

Vermont Marble Company

BUILDING GRANITE. Thin veneer and heavy masonry. Complete specifications and section details. 10 full-color illustrations of various granites. 8½ × 11. 4 pages. AIA No. 8-D3.

Also see 3, 29, 89, 90, 117, 120, 142.

67. Gratings

Penn Metal Company, Incorporated

PENMETAL EXPANDED METAL GRATINGS. Gives sizes, weights, dimensions and deflection tables for the various meshes available. Illustrated. 4 pages.

Also see 42, 61, 82, 99, 113.

Wheeling Corrugating Company

WALKWAY, SKYWAY AND GRATING MESHES. Description of Expanded Metal Gratings, weights and dimensions, deflection tables, suggestions for cutting and installing, and other pertinent information about use and application. 1960. 2 colors. 4 pages. AIA No. 14-D, WC-238-A.

Also see 2, 6, 19, 45, 53, 82, 93, 99, 114, 118, 130.

68. Grease Interceptors

Josam Manufacturing Company

MANUAL "JH." Details and specifications covering the only grease interceptor that automatically draws off intercepted grease at the turn of a valve. 1960. 8½ × 11. 4 pages. AIA No. 29-C-4.

MANUAL W. Handling interception problems of every type of commercial and industrial waste material. 1960. 8½ × 11. 28 pages. AIA No. 29-C-4.

69. Hardboard

The Celotex Corp., *see 2, 43, 74, 97, 113, 121.*

Georgia-Pacific

GEORGIA–PACIFIC HARDBOARDS. Complete specification data including standard, tempered, premium, factory finished, perforated, textured and laminated items. 8½ × 11. 8 pages. Form #HB-16.

National Paint, Varnish & Lacquer Association

PAINTING HARDBOARD.

Simpson Timber Company

SIMPSON HARDBOARD PRODUCTS. SAIMP–019/4917E. Complete description and specifications. 8½ × 11. 4 pages. AIA No. 23L.

United States Plywood Corporation

WELDWOOD HARDBOARDS. Describes characteristics and applications. 2 colors. 3¼ × 6¼. 6 pages. Form No. 1370A.

70. Hardware

Glynn-Johnson Corporation

CATALOG OF BUILDERS' HARWARE. Full descriptive data and templates of complete GJ line of door control hardware. Overhead arm type spring cushioned door stop and holders. Wall and floor mounted door holders and bumpers. Cabinet latches, invisible latches and silencers. Hardware specialists for all types of buildings, including theaters, stores, schools, hospitals, office buildings and institutions. AIA No. 27-B.

DOOR CONTROL HARDWARE (18e/GL). Condensed catalog of cushioned overhead door holders, wall and floor installed door holders and bumpers for entrance and interior doors. Also door silencers and latches.

SCHOOL DOOR CONTROL HARDWARE (B–8/GL). Door control hardware for entrance, gymnasium and all interior doors. Hardware built to absorb shock and sound as well as to protect doors and frames.

HOSPITAL DOOR CONTROL HARWARE (E–5). Door holding devices for entrance, supply and utility room doors. Complete hardware for the silent operation and control of patient room doors.

Kawneer Company, *see 29, 30, 34, 41, 44, 86, 135, 152, 153.*

Norton Door Closer Company, *see 34.*

S. H. Pomeroy Company, *see 7, 14, 80, 152.*

Sargent & Company

CONDENSED ARCHITECTURAL BUILDERS HARDWARE CATALOG. Concise information on Sargent's four major lock lines, rectangular and standard-liquid type door closers, exit devices, and miscellaneous builders hardware. Designed for easy selection of material. Features "Selector Charts" of functions and designs for IntegraLock®, Mortise Lock, SentryLock®, and the all new MagnaLock®. Specifications, application data and product features are included for each line. 16 pages. Form SW 9-60.

MAGNALOCK®. Describes Sargent's new line of heavy duty bored locks and latch sets. Trim design combinations and construction features are illustrated. Detailed function and specification information. Form MAG A-5-59.

RECTANGULAR, SURFACE AND CONCEALED DOOR CLOSERS. Illustrates and discusses application and construction features of Sargent's new rectangular style liquid door closers. Includes quick guide to selection of proper closer size and series. Form DC7-12-59.

Also see 34.

The Stanley Works, (Hardware Division)

NEW 1961 HINGE GUIDE H–155. Complete information on hinges for contract hardware application.

SCHOOL AND OFFICE BUILDING HINGE BROCHURE H–160. Proper selection of hinges for schools and office buildings.

HOSPITAL HINGE BROCHURE H–157. Proper selection of hinges for hospital use.

OLIVE KNUCKLE, PIVOT–REINFORCING, AND PAUMELLE HINGE FLIER H4.

Unique-Balance Division, S. H. Pomeroy Company

Unique sash balances and window hardware products—contains photos and diagrams of the different types of Unique balances; also the advantages of Unique's hardware window units.

Vonnegut Hardware Company, Van Duprin Division, *see 34.*

71. Heating

Frank Adam Electric Company

ELECTRIC HEATERS. Description and Data on "QUIKHETERS." Electric type built in heaters.

American-Standard, Air Conditioning Division

ELECTRIC RESISTANCE HEATING EQUIPMENT, Catalog AC–682. For Zonal Application, includes Baseboard . . . Wall Heaters . . . Ceiling Cable . . . Portables . . . Combination Heater, Light, Exhaust Fan and Circulator . . . ceiling panel. 8½ × 11. 8 pages.

Also see 6.

Indiana Limestone Institute, *see 2, 29, 53, 82, 85, 93, 114.*

Minneapolis-Honeywell Regulator Company

HONEYWELL CONTROLS FOR HOME COMFORT AND CONVENIENCE (50-0001). Illustrated catalog describing heating and air conditioning controls for the modern home: zone control systems, a full line of thermostats, central control panels (Weather Station). Electronic air cleaners for residential furnaces. Gas water heater controls. TAP–LITE and DIM–A–LITE switches and light controls. 1960. 2 color. 8½ × 11. 8 pages.

HONEYWELL INDOOR–OUTDOOR CONTROL SYSTEM (76-3892). Explains how this system precisely compensates for combined effects of sun, wind and outside temperature. Features the outdoor thermostat and a choice of indoor thermostats to complete the system. 1958. 2 color. 8½ × 11. 4 pages.

NOW THAT I KNOW . . . I'D NEVER WANT A HOME AGAIN WITHOUT *TWO* FURNACES (76-4972). Features the importance of a two-furnace, warm air heating plant in homes with split levels, large glass areas, spread-out floor plans, finished basements and rooms over unheated areas. Explains the advantages of zoning and the use of more than one thermostat. 1959. 4 color. 8¾ × 9⅝. 8 pages.

BELIEVE ME! MY HOME MUST HAVE 2–ZONE HEATING WITH HOT WATER (76-4973). Shows the comfort and convenience of a 2-zone, hot water heating plant in homes with split levels, large glass areas, spread-out floor plans, finished basements and rooms over unheated areas. Explains the advantages of zoning and the use of more than one thermostat. 1959. 4 color. 8¾ × 9⅝. 8 pages.

THE MOST EXCITING ADVANCE IN AUTOMATIC LIVING SINCE AIR CONDITIONING ITSELF (76-8470). Explains and illustrates central control panel for residential air conditioning. 1960. 4 color. 9 × 12. 4 pages.

Also see 6, 8, 37, 38, 49, 84.

Westinghouse Electric Corporation, Air Conditioning Division

GAS HEATING COMFORT. Full color folder describing operation of Westinghouse Residential gas furnaces. 8½ × 11. 4 pages.

HEATING COMFORT WITH OIL. Full color folder showing how comfort is built into Westinghouse residential oil furnaces. 8½ × 11. 4 pages.

HEATING AND COOLING ELECTRICALLY. Full color folder describing operation of Westinghouse residential heat pumps. 8½ × 11. 4 pages.

WESTINGHOUSE HEAT PUMP FOR COMMERCIAL, INSTITUTIONAL, TENANT, AND INDUSTRIAL USE. Descriptive folder showing non-residential applications of heat pumps. Condensed specifications of Westinghouse heat pumps are included. 8½ × 11. 4 pages.

WESTINGHOUSE ELECTRIC HEATING. Descriptive folder outlining commercial and residential applications of various types of Westinghouse electric heaters. Condensed specifications for floor, bathroom, wall, and baseboard models are included. 8½ × 11. 4 pages.

Also see 6.

72. Hospital Equipment

Executone, Inc., *see 25, 125, 128.*

73. Insulation

Allied Chemical Corporation, Barrett Division

R–1219 ROCK WOOL INSULATION BOOKLET. Explains briefly and completely the various types of Barrett Rock Wool Insulation. Illustrated. 2 color. 8½ × 11. 4 pages.

F–1267 INSULATION BOARD PRODUCTS CATALOG. Contains information on structural products such as Rigidwall nail base sheathing, insulating sheathing, insulating shingle backer. Also interior products such as insulating wall plank, insulating building board and ceiling tile. Illustrated. 8½ × 11. 12 pages. AIA No. 37-A.

R–1281 MINERAL WOOL INSULATION CATALOG. Explains briefly and completely the various types of Barrett Mineral Wool Insulation. Illustrated. 8½ × 11. 4 pages. AIA No. 37-C.

Also see 97, 102, 109, 118, 121, 124, 142, 148.

The Celotex Corporation, *see 2, 43, 74, 97, 113, 121, 148.*

The Dow Chemical Company, Plastic Sales Department

SCORBORD: PERIMETER INSULATION. Properties, installation instructions and specifications. 8½ × 11. 16 pages. AIA No. 37-B.

STYROFOAM: INSULATION—PLASTER BASE. Properties and specifications for insulation — plaster base insulations. 157-85. (Sweet's insert)

STYROFOAM: LOW TEMPERATURE SPACE.

STYROFOAM: PIPE AND VESSEL COVERING.

STYROFOAM: COMFORT INSULATION. Specifications and complete installation data for all comfort applications. 8½ × 11. 16 pages. AIA No. 37-B.

ROOFMATE: ROOF INSULATION.

Johns-Manville Sales Corporation

JOHNS–MANVILLE SPINTEX INSULATION. Description of J-M Spintex Mineral Wool Batts and Blankets for home insulation. 1958. 8½ × 11. 12 pages.

J–M FIBER GLASS HOME INSULATION. Complete product data, description and installation details. 1959. 8½ × 11. 6 pages.

JOHNS–MANVILLE INSULATION PRODUCT INFORMATION. Illustrations, description, advantages and physical properties of all J-M industrial insulations. Thumb-indexed, plastic-spiral binding. 1960. 8½ × 11. 64 pages.

National Mineral Wool Insulation Association, *see 74.*

Pittsburgh Plate Glass Company, *see 63.*

Simpson Timber Company

SIMPSON INSULATING BOARD, EASY WALL PANELING AND PARTITIONS, ROOF DECK PRODUCTS, ACOUSTICAL AND HARDBOARD PRODUCTS. SAIMP–019/4917. Complete information including application instructions. 8½ × 11. 28 pages. AIA No. 37-B.

Vermiculite Institute, *see 147.*

Zonolite Company

ZONOLITE MASONRY FILL INSULATION FOR BLOCK WALLS. Technical data on new water-repellent insulation with graphs, tables, properties, coverage data, and short form specifications. MF-2. 1959. 8½ × 11. 4 pages. AIA No. 37-C-2.

ZONOLITE MASONRY FILL INSULATION FOR CAVITY WALLS. Complete data includes coverage and installation, "U" values, tables, properties, and short form specifications. MF-3. 1959. 8½ × 11. 4 pages. AIA No. 37-C-2 and No. 5-N.

ZONOLITE INSULATING FILL INSULATION. Data sheet on insulation of horizontal attic areas. HI-119. 1960. 8½ × 11. 2 pages. AIA No. 37-C-2.

ZONOLITE BUILDING INSULATION. Summary brochure on fill and blanket type insulation for use in attics, concrete block and cavity walls and residential wall insulation. HI-135. 1960. 8½ × 11. 4 pages. AIA No. 37-C-2.

ZONOLITE GLASS FIBER HOME INSULATION. Technical data on blanket insulation in all residential type buildings including particulars on insulating for air-conditioning and electrically heated buildings. HI-97. 1960. 8½ × 11. 2 pages.

ZONOLITE INSULATION FOR ELECTRIC HEAT AND AIR-CONDITIONING. Summary on the application of Zonolite Ma-

Insulation continues—

sonry Fill and Insulating Fill in attics and block and cavity walls. HI-108. 1960. 8½ × 11. 4 pages. AIA No. 37-C-2.

74. Insulation, Building

The Celotex Corporation

TECHNICAL SERVICE DATA NO. 2, FEDERAL, ASTM, & NAVY SPECIFICATIONS. Selections of Celotex Building Products complying with these specifications. 1961. 8½ × 11. 4 pages. AIA Nos. 40-B-3, 40-B-6.

SWEET'S ARCHITECTURAL FILE INSERT. Description of Celotex Structural Fiberboard Products, physical property data and application specifications. 8½ × 11. 12 pages. AIA No. 37-A.

ARCHITECT SPEC. NO. 20, REGULAR ROOF INSULATION. Description of product, recommended uses, physical property data and detailed specifications. 8½ × 11. 4 pages. AIA No. 12-B.

ARCHITECT SPEC. 21, PRESEAL ROOF INSULATION. Recommended uses, physical property data and detailed specifications for application over all types of roof decks. 8½ × 11. 4 pages. AIA No. 12-B.

ARCHITECT SPEC. NO. 23, CELOTEX CHANNEL–SEAL ROOF INSULATION. Description, uses, physical properties, special features, advantages, and detailed specifications for use over all types of roof decks. 8½ × 11. AIA No. 12-B.

ARCHITECT SPEC. NO. 80, INSULATING BLANKETS. Description of products, tables of thermal insulating values of various thicknesses and types, specifications. 8½ × 11. 4 pages.

ROOF INSULATION MANUAL. Design and thermal insulation data. 8½ × 11. 32 pages.

ARCHITECT SPEC. NO. 45, INSULATING ROOF DECK. Description, use, physical properties (summary of test results), special features (direct application of asphalt shingles), advantages, and detailed specifications for use as structural roof decking. 8½ × 11. 4 pages. AIA No. 37-A.

Also see 2, 43, 97, 113, 121, 148.

National Mineral Wool Insulation Association

HOW TO INSTALL MINERAL WOOL INSULATION IN HOMES. Illustrated instructions on how mineral wool batts, blankets and blowing and pouring wools should be installed in homes. 1960. 7⅝ × 5¼. 32 pages. Price to Producers' Council members, architects, engineers: 20¢ copy (at cost, prepaid).

HOW TO GET THE MOST VALUE FROM YOUR MINERAL WOOL INSULATION. How to get maximum warmth or coolness, also common sources of moisture from bathing, cooking, washing within the house and what to do about them. 1950. 8½ × 5½.

HOW TO CONTROL MOISTURE IN HOMES. Complete discussion of sources of moisture from outside, inside, and underside of homes and what can be done about correcting them. Illustrated form for homeowner to make his own check on his house. 1953. 8½ × 5½. 72 pages. Price to Producers' Council members, architects, engineers: 20¢ copy (at cost, prepaid).

FIRE CAN BE STOPPED. How mineral wool insulation adds fire resistance to buildings of all types. 1952. 7 × 9¼. 26 pages.

HOW TO INSULATE YOUR HOME FOR ELECTRIC HEATING. Illustrated application procedures recommended for installing mineral wool products in electrically heated homes. Brief description of available heating equipment. 1960. 7⅝ × 5¼. 32 pages. Price to Producers' Council members, architects, engineers: 15¢ copy (at cost, prepaid).

CUTTING AIR CONDITIONING COSTS WITH INSULATION. Comparative study of equipment and operating costs in widely varying climates.

Vermiculite Institute, *see 147.*

75. Insulation, High Temperature

The Celotex Corporation, *see 2, 43, 74, 97, 113, 121.*

Johns-Manville Sales Corporation

THERMOBESTOS PIPE & BLOCK INSULATION. Illustrated brochure on calcium silicate high temperature insulation. Complete physical & thermal properties, complete heat transmission tables for pipe & block, advantages, etc. 1960. 8½ × 11. 20 pages.

Zonolite Company

ZONOLITE HIGH TEMPERATURE INSULATING CEMENT. Technical data and illustrations on premixed high temperature cement for buildings, refineries, hot lines, etc. G-18. 1952. 8½ × 11. 8 pages.

Pittsburgh Plate Glass Company, *see 63.*

Vermiculite Institute, *see 147.*

76. Insulation, Low Temperature

The Celotex Corporation, *see 2, 43, 74, 97, 113, 121.*

The Dow Chemical Company, Plastic Sales Department

STYROFOAM: LOW TEMPERATURE INSULATION. (Form No. 157-97). Properties, specifications and complete installation instructions for coolers, freezers and sharp freezer rooms. 8½ ×11. 12 pages. AIA No. 37-D-1.

Pittsburgh Plate Glass Company, *see 63.*

Vermiculite Institute, *see 147.*

Zonolite Company

ZONOLITE COLD STORAGE INSULATION MANUAL. Technical data, charts, specifications; installation procedure for cold storage insulation. CS-4. 1958. 8½ × 11. 8 pages. AIA No. 37-D-1.

77. Insulation, Pipe Covering

Armstrong Cork Company

ARMSTRONG INDUSTRIAL INSULATIONS. Sweet's Catalog Insert. Descriptions, technical data, and specifications on line of insulation materials. Armalite, Armaflex and erection and finishing sundry materials included. 1961. 8½ × 11. 8 pages.

Also see 2, 55, 58, 114, 116, 149.

The Dow Chemical Company, Plastic Sales Department

STYROFOAM: PIPE AND VESSEL COVERING (Form No. 157-57). Properties, specifications and complete installation data for pipe and vessel covering under 170°F. 8½ × 11. 12 pages. AIA No. 37-B.

Johns-Manville Sales Corporation

MICRO–LOK FIBER GLASS PIPE INSULATION. Contains description, complete physical & thermal properties, thickness comparison chart, jacket information, and specification guide and size table. 1959. 8½ × 11. 8 pages.

Pittsburgh Plate Glass Company, *see 63.*

Vermiculite Institute, *see 147.*

78. Insulation Accessories

The Celotex Corporation, *see 2, 43, 74, 97, 113, 121.*

79. Interior Trim

Indiana Limestone Institute, *see 2, 29, 53, 82, 85, 93, 114.*

Penn Metal Company, Incorporated, *see 42, 61, 67, 82, 99, 113.*

80. Kitchen Equipment

American-Standard, Youngstown Kitchens Division

WOODCHARM SPEC SHEET.

PROVINCIAL SPEC SHEET.

CHERRYWOOD SPEC SHEET.

VENT HOOD SPEC SHEET.

DIANA 24" SPEC SHEET.

FULL LINE CATALOG.

30" DISHWASHERS SPEC SHEET.

FWD—FOOD WASTE DISPOSERS 200, 300, 400.

GAS AND ELECTRIC BUILT–INS SPEC SHEET.

Caloric Appliance Corporation

CALORIC COLOR–COORDINATED KITCHEN SPECIFICATION SHEET. Photographs of three unusual kitchens with Caloric built-in gas ranges plus specifications for the ranges, kitchen ventilating hoods and sinks which can be supplied in matching colored porcelain enamel. 8½ × 11. 6 pages.

S. H. Pomeroy Company

LITE–LIFT PASS WINDOWS. Brochure illustrates use of "Lite-Lift" vertical sliding units as pass windows. Panels and frame of anodized aluminum. Simplicity of construction, ease of operation with UNIQUE spiral balances significant features. Table of standard sizes included. 8½ × 11. 2 pages, includes tracing details.

Also see 7, 14, 70, 152.

Security Fire Door Company

SECURITY PASS AND SERVICE WINDOWS. Application and use ideas: complete enclosed integral one-piece frame and door wall unit. Details, space requirements, minimum considerations, extra accessories, installations, photographs. 1960. 8½ × 11. 6 pages.

Westinghouse Electric Corporation, Major Appliance Division

WESTINGHOUSE APPLIANCES FOR HOME PLANNING. Full line appliance catalog is included in 1961 Sweet's Architect and Light Construction Files. Includes specifications, dimensions and features of built-ins, free-standing models and kitchen cabinets. 8⅜ ×10⅞. 16 pages.

WESTINGHOUSE HEIRLOOM MAPLE FINISH WOOD CABINETS. Folder covering specifications and details on Westinghouse Wood Cabinets for kitchen and laundry areas. 8⅜ × 10⅞. 8 pages.

81. Laminated Products

American-Saint Gobain Corporation, *see 29, 63.*

Davidson Enamel Products, Inc., Subsidiary of Fenestra, Incorporated

SWEET'S ARCHITECTURAL FILE INSERT. Laminated panel information using architectural poreclain as exterior facing to variety of core materials. Insert pages include designs for making selections. 1961. 8½ × 11. 12 pages. AIA No. 15-M-1.

Timber Structures, Incorporated, *see 62.*

82. Lath

Allied Chemical Corporation, Barrett Division, *see 73, 97, 102, 109, 118, 121, 124, 142, 148.*

The Celotex Corporation, *see 2, 43, 74, 97, 113, 121.*

Indiana Limestone Institute

METAL LATH & ACCESSORIES. Catalog 202.

Also see 2, 29, 53, 85, 93, 114.

Inland Steel Products Company

MILCOR METAL LATH AND ACCESSORIES CATALOG NO. 202. Detailed information on complete line of Milcor Metal Lath and Accessories and Milcor Interior Metal Trim. Complete information on sheet sizes, materials, weights and packing; tables listing maximum spacing of supports for various types of lath, and safe loads for rib laths used as centering for wet concrete. Also describes Milcor Window Stools, Metal Bases, Cove Moulds, Chair Rails and lathing accessories such as Milcor Metal Access Doors, Corner Bead, Casing Bead, Base Screed, Picture Moulds, Casing Moulds, and solid and hollow partition systems. 8½ × 11. 20 pages. AIA No. 20-B-1.

Penn Metal Company, Incorporated

METAL LATH AND PLASTERING ACCESSORIES. Description, illustration, profile drawing and specifications for more than 30 different products, including five styles of metal lath, cold-rolled channels, cornerite, metal arches, corner beads, base screeds and picture mold. Also includes details of Penmetal casing beads, which are made in the most complete line available today; steel studs for non-bearing hollow partitions; metal base and ceiling runners. Gives complete specifications for the erection of metal lath. 24 pages.

PLASTERERS' EXPANSION JOINT. Details of an expansion joint designed to reduce cracking in plastered walls and ceilings and cement plaster exterior stucco. 4 pages.

PENMETAL PRONGED CEILING RUNNERS AND FLOOR TRACK. Three products designed to reduce the cost of attaching channel studs and hollow-partition studs to floors and ceilings. Cost savings result from faster erection, made possible by the prong method of attachment. 8½ × 11. 2 pages.

Also see 42, 61, 67, 99, 113.

Wheeling Corrugating Company

WHEELING METAL LATH AND ACCESSORIES. Describes various types of Metal Lath made of Wheeling's famous Cop-R-Loy (copper bearing) Steel and the many choices of accessories, including corner beads, channels, casing beads, moulds, screeds, and other items. Technical information is given concerning fireproofing of columns and beams, walls and partitions. Catalog also contains fire resistive ratings, tables for the selection of types and weights of Metal Lath, proper spacing of supports, sound ratings, etc. 1960. 2 colors. 8 pages. AIA No. 20-B-1. WC-240.

Also see 2, 6, 19, 45, 53, 67, 93, 99, 114, 118, 130.

83. Lighting and Lighting Fixtures

The Art Metal Company

CATALOG 757—AMCOLENS INCANDESCENT LIGHTING. Complete selection of specifically engineered incandescent lighting products for all commercial applications features 27 clear prismatic Amcolenses. Lighting performance data, mechanical constructions and installation methods are fully detailed and graphically illustrated. 8½ × 11. 64 pages. AIA No. 31F-2.

BULLETIN 858—LIGHT MODERN WITH AMCODRUMS. Illustrated in full color and with application sketches, this most complete line of style—designed drum-type equipment offers 91 selective combinations in choices of fixture types, glass styles, wattages and finishes. 8½ × 11. 16 pages. AIA No. 31F-2.

BULLETIN 159—AMTEX PREWIRED RECESSED LIGHTING. Four complete prewired housing series illustrated in full color with application sketches. New exclusive Clinch-Cleat mounting equipment and completely accessible junction box. Wiring and installation clearly diagrammed. 8½ × 11. 8 pages. AIA No. 31F-2.

Day-Brite Lighting, Inc.

COMFORT CONDITIONING WITH LIGHT AND AIR. Lighting and air distribution combination equipment developed by Day-Brite and Barber-Colman Co., fully described, with performance data and specifications. 1960. 8½ × 11. 24 pages. AIA Nos. 31-F-2 and 30E.

HOSPITAL LIGHTING MANUAL. 1961 publication.

Fenestra Incorporated

FENESTRA "RLT" TROFFER PANELS used in conjunction with "D" panel cellular panel construction. Specification and design information.

Rohm & Haas Company

PLEXIGLAS FOR LIGHTING (PL-399). Covers types and characteristics of Plexiglas sheets and molding powders, lighting uses, spectrophotometric and distribution curves, coefficients of utilization. 1959. 8½ × 11. 40 pages.

PLEXIGLAS IN LIGHTING (PL-443). Brochure showing in full color various notable installations of lighting that use Plexiglas diffusing panels or light-control lenses. 1961. 8½ × 11. 20 pages.

Unistrut Products Company

NO. FL-1 FLUORESCENT FIXTURE SUPPORTS AND RACEWAYS BROCHURE. Describes advantages, assembly details and installation methods in using UNISTRUT metal framing for fluorescent fixture supports and raceways. Also contains technical data and parts information. Fully illustrated. 2 color. 1958. 8½ × 11. 6 pages. AIA No. 31-F-2.

The Wakefield Company

GRENADIER II AND IV. Three separate Spec-Data sheets illustrating two types of Grenadier II, a two lamp fluorescent louvered unit with a translucent plastic side panel and Grenadier IV, a four lamp unit. Complete dimensional illustrations for mounting and knockouts.

CAVALIER. A suspended luminaire with unframed luminous plastic side panels. Sliding stem plate provides complete flexibility for mounting the Cavalier at any point. Factual Spec-Data sheet.

PACEMAKER. A pure white baked enamel finished unit, highly recommended for schools, offices and stores. Separate Spec-Data

Lighting and Lighting Fixtures continues—

sheets showing slotted and solid side panels with 45° × 45°, 25° × 35° and 35° × 45° louvers. All mounting dimensions completely illustrated.

WAKEFIELD INDUSTRIALS. In 8–15%, 20–30% and 30–40% uplight ranges. Spec-Data sheets available on all units and on the complete line of incandescent and mercury vapor industrials.

C-60 CATALOG SUPPLEMENT. Features new Wakefield Hinged and Framed Troffer in five sizes; new slim, trim 1′ × 4′ Omega with light controls matching the Troffer line; Sigma III, a new complete luminous ceiling combining heat and air conditioning.

PHOTOMETRIC. Wakefield's newest luminaire. Available in four and eight foot lengths in styrene or acrylic refractors. Complete information, including ETL data, available on illustrated Spec sheets.

84. Lighting Controls

Minneapolis-Honeywell Regulator Company

WITH NATURAL DAYLIGHTING USE HONEYWELL LIGHT SAVER CONTROLLED LIGHTING (76-3672). Describes and illustrates Honeywell's automatic control of artificial lighting in buildings with "daylighting" walls and fenestration. Shows how automatic shutting off and relighting of lights can save enough to pay for the daylighting materials. 1957. 2 color. 8½ × 11. 4 pages. AIA No. 20-A.

HONEYWELL DIM-A-LITE BRIGHTNESS CONTROL (76-4317). Discusses the four stages of illumination offered by Dim-A-Lite and pictures its unique decorator feature. Gives complete specifications and highlights both the Incandescent and Fluorescent models available. 1958. 2 color. 8½ × 11. 2 pages.

HONEYWELL TAP-LITE DECORATOR WALL SWITCH (76-8018). Describes Honeywell Tap-Lite, first completely new concept of line-voltage light switch design. Gives specifications and ordering information. 1959. 2 color. 8½ × 11. 2 pages.

Also see 6, 8, 37, 38, 49, 71.

85. Limestone

The Georgia Marble Company, *see 118, 134, 143.*

Indiana Limestone Institute

AMERICAN STANDARDS SPECIFICATIONS A93.1. Master specifications on grade, finish, color, etc.

A PORTFOLIO OF DETAIL PLATES. Details on spandrels, walls, steps, sills, lintels, soffit, facing, coping, rose window, gothic arch, entrances, windows, doorways, supports and anchors.

FOR THE ARCHITECT. Photographic description of grades, finishes, color tones.

STONE—THE GOLDEN THREAD. A comprehensive review of use of stone in contemporary architecture.

RANDOM ASHLAR MASONRY GUIDE. A "How to do" brochure.

SWEET'S CATALOG INSERT. Uses, descriptions, specifications for cut stone and setting, cleaning and waterproofing specifications.

Also see 2, 29, 53, 85, 93, 114.

86. Louvers, Aluminum

Indiana Limestone Institute, *see 2, 29, 53, 82, 85, 93, 114.*

Kawneer Company, *see 29, 30, 34, 41, 44, 135, 152, 153.*

87. Louvers, Sun Control

Arcadia Metal Products

BRISE SOLEIL. Arcadia Brise Soleil description, application, details, and engineering data available on custom engineered aluminum solar screen in anodized and enamel finishes. 8½ × 11. 8 pages.

California Redwood Association, *see 88.*

Lemlar Manufacturing Company

THERMAL BEHAVIOR OF METAL CURTAIN WALLS. Reprint from *Air Conditioning, Heating and Ventilating Magazine.* Evaluates results of research at Princeton University on solar-heat loads. Discusses building orientation, geographical location, effect of various glass/opaque wall area ratios and effectiveness of shade devices. 4 pages.

DATA UNIT # 075, Solar heat-load chart for latitudes 30°, 40°, and 50° north. 1 page.

SUN ANGLE CHARTS. Show hourly sun angles for 21st of March, June, Sept., & Dec. (Specific location reference required—sizeable city or latitude & longitude.) 3 pages.

CASE HISTORIES OF LOUVER INSTALLATIONS:

DATA UNIT # 012, Adjustable Louvers at No Cost. 1 page.

DATA UNIT # 055, Sun Louvers Save $2,214 for Owner. 1 page.

DATA UNIT # 061, Reynolds Metals Building—Sun Louvers are a Sound Investment. 4 pages.

DATA UNIT # 064, Sun-Louver Installation, a Single Solution to Several Problems. 2 pages.

DATA UNIT # 074-R, FIDELITY FEDERAL solves costly heat problem with LEMLAR automatic sun louvers. 2 pages.

1961 SWEET'S INSERT. Catalog contains details and specifications for all types of Lemlar sun louvers, roughing-in dimensions and schematic-wiring diagrams, and specifications for electric operators and automatic louver controls. Includes data on Effect of Latitude on Solar-Heat Gain at Windows. Illustrated. 20 pages. AIA No. 35-P-2.

SOLAR-HEAT LOADS—SOME FUNDAMENTAL FACTS. Data Unit # 008-R. Simple explanation of the effect of solar-heat gain through glass and its effect on total building costs. Condensed from *Architectural Forum* article. 2 pages.
Size: All are 8½ × 11.

88. Lumber

California Redwood Association

ARCHITECT'S REDWOOD FILE. Compilation of data on redwood for specific use of architects. Includes studies on durability, strength, hardness and shrinkage of redwood as compared to other species, suggested exterior and interior finishes of the product; ideas for use in homes and gardens; description of various grades of redwood. 8½ × 11.

STANDARD SPECIFICATIONS FOR GRADES OF CALIFORNIA REDWOOD LUMBER. Description of all grades of redwood lumber, including both yard grades and special purpose grades; reproduction of grade marks; standards of dryness. May 1960. 6¼ × 3½.

STANDARD PATTERNS OF WORKED REDWOOD LUMBER. Full sized details of worked redwood. Pattern Book No. 5. August 1958. 8½ × 11.

REDWOOD NEWS. News summary of the latest and most interesting architectural use of redwood; photographs of use in commercial or artistic or home construction design; datebook reminders for architects, and construction engineers. Quarterly. 8 × 4. 16 pages. *When requesting, give home address.*

EXTERIOR FINISHES FOR REDWOOD. Gives various types of natural exterior finishes and the performance to be expected from each. Includes water-repellents, stains and bleaches. Supplement lists tested brands and manufacturers. 8½ × 11.

GARDEN FILE. Includes data and idea material for use of redwood in all garden applications. Information for Landscape Architects on fences, planters, patio paving and decks, garden structures, trellises, retaining walls, and garden furniture. 8½ × 11.

GARDEN REDWOOD. Booklet is colorfully illustrated with ideas for use of redwood in the garden. Included in Garden File and Architect's File. 8½ × 11.

REDWOOD HOMES. Design ideas from homes architects have designed for themselves, using redwood. Included in Architect's File. 8½ × 11.

REDWOOD SIDING SERIES. Data Sheets 3A4-1 to 3A4-8. Full information on various types of redwood siding and application methods for each. Included in Architect's File. 8½ × 11.

REDWOOD INTERIORS. Data Sheets giving information on specification, application, and finishing of redwood in interior uses. Includes information on redwood for paneling, ceilings, and grillework. Included in Architect's File. 8½ × 11.

REDWOOD GOES TO SCHOOL. Illustrates how redwood is used in building beautiful, functional schools throughout the United States. Contemporary structures are designed by leading architects. 8½ × 11. 16 pages.

Georgia-Pacific

GEORGIA–PACIFIC REDWOOD. Definitions and 4 color illustrations of grades. Contains where-to-use information. 8½ × 11. 8 pages. Form H-1A.

Simpson Timber Company

SIMPSON REDWOOD ALL–PURPOSE BROCHURE. Complete file on specifications, uses, etc. 8½ × 11. 32 pages.

REDWOOD SIDING AND PANELING. SRMP-029/4859. Complete details on exterior redwood siding, Lifecoat redwood products and La Honda interior redwood paneling. 8½ × 11. 4 pages. AIA No. 19-D-2.

West Coast Lumbermen's Association

WHERE TO USE UTILITY GRADE WEST COAST LUMBER. Gives recommendations on where to use Utility grade Douglas Fir, West Coast hemlock, Western Red cedar, Sitka spruce and White fir. Also includes span tables from FHA data on rafters and ceiling and floor joists. 8½ × 11. 4 pages.

GRADES—USES—SPECIFICATIONS. Contains helpful information on specifying and using West Coast lumber. 8½ × 11. 20 pages. Free. Sweet's File 5a/Wes.

STANDARD SPECIFICATIONS FOR STRUCTURAL GLUED LAMINATED WEST COAST HEMLOCK. These specifications are published in two parts, *Design* and *Fabrication*. Each: 8½ × 11, 12 pages.

STANDARD SPECIFICATIONS FOR STRUCTURAL GLUED LAMINATED DOUGLAS FIR (COAST REGION). These specifications are published in two parts, *Design* and *Fabrication*. Each: 8½ × 11, 12 pages.

TODAY'S BETTER SCHOOLS ARE BUILT OF WOOD. Points out the many advantages of wood in school construction. Full color illustrations. 8½ × 11. 12 pages. AIA No. 19-A-1.

BEAUTIFUL CHURCHES OF TODAY. Architecturally-famous wood churches of the West, with exterior and interior photographs and descriptive text. Covers 14 churches. 8½ × 11. 12 pages. AIA No. 19-B-3.

FACTS ABOUT WHITE POCKET LUMBER. Describes results of tests made by U. S. Government Forest Products Laboratory on Douglas fir containing white pocket. 8½ × 11. 8 pages.

SUGGESTIONS FOR BUILDING A PLANK AND BEAM ROOF. Gives data on spans and construction of roofs, using plank decks, 2", 3" and 4" thick. 8½ × 14. One sheet, both sides printed.

WEST COAST HEMLOCK LUMBER GRADES AND USES. Discusses qualities and characteristics of West Coast hemlock when used for specific building purposes. 8½ × 11. 44 pages. AIA No. 19-A-1.

DOUGLAS FIR LUMBER GRADES AND USES. Outlines the properties of Coast region Douglas fir and discusses its qualities and characteristics when used for specific building purposes. Details its insulating qualities and shrinkage abilities. Generously illustrated with clear photographs of standard, utility, construction and economy grades in various framing dimensions. 8½ × 11. 44 pages. AIA No. 19-A-1.

WESTERN RED CEDAR LUMBER GRADES AND USES. Outlines the qualities and characteristics of West Coast red cedar when used for specific building purposes. 8½ × 11. 36 pages. AIA No. 19-A-1.

DOUGLAS FIR USE BOOK, 1958 EDITION. Contains structural data and design tables for architects, engineers and students. Completely revised edition is the result of several years of intensive work under the guidance of a special committee representing architects, engineers, wood preservers, fabricators and lumber manufacturers. It contains much new and valuable information, with many useful tables, on timber design. The book is bound in durable cloth and is stitched so that it will lay flat. A partial summary of contents: lumber grades, working stresses, structural glued laminated lumber, wood preservation, stud walls, timber connectors, lateral forces and fire protection. 24 specific title headings in all. 8½ × 11. 294 pages. *Price $5.00.*

CONSTRUCTION AND ANALYSIS OF SIMPLE HYPERBOLIC-PARABOLOID SHELLS OF WEST COAST LUMBER. Contains photographs of construction sequences and gives procedure for stress analysis. 8½ × 11. 8 pages.

CHART FOR DETERMINING UNIFORMLY LOADED JOISTS, RAFTERS, PLANK AND LAMINATED SPANS when Limited by Deflection or Limited by Bending Stress. Easy to use nomographic chart applicable to all species and grades of lumber. 5½ × 8½. Simple folder.

BUILDING GUIDE FOR GOOD HOUSE PAINTING. Describes condensation and moisture control, which affect paint durability, and basic requirements for good painting. Clearly illustrated. 8½ × 11. 12 pages.

STANDARD GRADING AND DRESSING RULES NO. 15. Contains complete information about grading rules covering Douglas fir, West Coast hemlock, Western red cedar and Sitka spruce. 3½ × 6. 346 pages. *Single copies free.*

Western Pine Association

PONDEROSA PINE: ITS PROPERTIES, USES AND GRADES. Species book, illustrations include photos of species in WPA grades. 8½ × 11. 72 pages. AIA No. 19.

IDAHO WHITE PINE: ITS PROPERTIES, USES AND GRADES. Species book, fully illustrated, including photos of WPA grades for this species. 8½ × 11. 64 pages. AIA No. 19.

LARCH OF THE WESTERN PINE REGION: ITS PROPERTIES, USES AND GRADES. Species book, fully illustrated, including photos of WPA grades for this species. Working stress table. 8½ × 11. 52 pages. AIA No. 19.

SUGAR PINE: ITS PROPERTIES, USES AND GRADES. Species book, fully illustrated including photos of WPA grades for this species. 8½ × 11. 52 pages. AIA No. 19.

WHITE FIR OF THE WESTERN PINE REGION: ITS PROPERTIES, USES AND GRADES. Species book, fully illustrated including photos of WPA grades for this species. 8½ × 11. 56 pages. AIA No. 19.

DOUGLAS FIR OF THE WESTERN PINE REGION: ITS PROPERTIES, USES AND GRADES. Species book, fully illustrated including photos of WPA grades for Douglas Fir, plus table of working stresses for this species. 8½ × 11. 52 pages. AIA No. 19.

ENGELMANN SPRUCE OF THE WESTERN PINE REGION: ITS PROPERTIES, USES AND GRADES. Species book, fully illustrated including photos of WPA grades for this species. 8½ × 11. 48 pages. AIA No. 19.

LODGEPOLE PINE GRADE USE GUIDE. Describes grades for uses for this species, including photos of WPA grades. 8½ × 11. 12 pages. AIA No. 19-A-1.

FACTS ABOUT INCENSE CEDAR. Provides general information about Incense Cedar lumber, its properties and uses. Illustrated. 8½ × 11. 4 pages.

FACTS ABOUT INLAND RED CEDAR. Provides general information about Inland Red Cedar, including its properties and uses. Illustrated. 8½ × 11. 4 pages.

STANDARD WPA GRADING RULES for Ponderosa Pine, Douglas Fir, White Fir, Engelmann Spruce, Sugar Pine, Idaho White Pine, Larch, Lodgepole Pine, Incense Cedar, Red Cedar, Western Hemlock, as provided by Western Pine Association. 3½ × 6½. 156 pages.

GRADE STAMP MANUAL. Gives details of use of authorized marks for grade-stamping under WPA rules. Includes actual facsimiles for each of the 11 species, showing how used, with WPA grades. 3½ × 8½. 8 pages.

STRUCTURAL GLUED–LAMINATED LARCH. Standard Specifications for Design and Fabricating. Technical file of all data and information of Larch species used in this manner. 8¾ × 12. 11 pages. AIA No. 19-K.

DIMENSIONAL STABILITY REPORT ON WESTERN PINE REGION SPECIES. Research Note 1.114. Laboratory data, tables, graphs, technical information from continuous studies on species. 8½ × 11. 17 mimeographed pages.

STANDARD PATTERNS. Reduced scale profiles (with measurements shown) of Standard Association patterns for siding, flooring, ceiling, partitions, corn-cribbing, roofing, lath, pulley stiles, jambs. 8½ × 11. 4 pages. (Punched for ring binder.)

Lumber continues—

SHEET–BOARD. Panelized lumber, glue-bonded between tough kraft paper for remarkably rigid sheathing panels. Illustrated, includes description, uses, properties and specifications. 8½ × 11. 6 pages, gatefold. AIA No. 19-D-3.

WPA UTILITY GRADE SPANS AND USES. Grade descriptions, uses, strength tables of economical Utility Grade lumber in WPA species, in full-color presentation. 8½ × 11. 6 pages, gatefold. AIA No. 19-A-2.

89. Marble, Exterior

Carthage Marble Corporation

SWEET'S ARCHITECTURAL FILE INSERT, 1961 EDITION. Shows examples of Carthage Exterior Marble, Carthage Exterior Marble Panels and Split-Face Carthage Marble Veneers. Gives factual data on physical properties, weathering properties and unusual soundness of Carthage Exterior Marble. Also shows examples of other exterior marbles used in curtain-wall construction.

The Georgia Marble Company, *see 118, 134, 143.*

Marble Institute of America, Incorporated

STANDARD SPECIFICATIONS FOR THE SUPPORT, ANCHORAGE AND PROTECTION OF EXTERIOR MARBLE VENEER, TWO INCHES AND LESS IN THICKNESS AND EXTERIOR MARBLE USED IN CURTAIN OR PANEL WALLS. (ASA) 1958. 10 detail plates. 8½ × 11. 14 pages. AIA No. 8-B-1.

Also see 90.

Vermont Marble Company

EXTERIOR MARBLE. Illustrations, section details and complete specifications for Exterior Marble Veneer. 8½ × 11. 4 pages. AIA No. 8-B-1.

Also see 3, 29, 66, 90, 117, 120, 142.

90. Marble, Interior

Carthage Marble Corporation

SWEET'S ARCHITECTURAL FILE INSERT, 1961 EDITION. Shows photographs of outstanding interior marble installations. Gives information about the services provided by Carthage Marble Corporation, as well as facts and figures about the cost of constructing with marble. Color plates show famous, low-cost Mid-American Marbles.

The Georgia Marble Company, *see 118, 134, 143.*

Marble Institute of America, Incorporated

STANDARD SPECIFICATIONS FOR INTERIOR MARBLE. Includes recommended specifications for setting Interior Marble of all types and recommended details for various interior uses of marble. (ASA) 1958. 8½ × 11. 18 pages and 18 detail plates. AIA No. 22-A.

PROOF THAT MARBLE COSTS LESS, WEARS BETTER, LASTS LONGER. Folder citing the advantages and economies of marble with case histories of actual installations. Illustrated. 8½ × 11. 20 pages. AIA No. 22-A.

FURTHER PROOF THAT MARBLE COSTS LESS, WEARS BETTER, LASTS LONGER. Cites the advantages and economies of marble in relation to the total cost of the building. Illustrated. 8½ × 11. 28 pages. AIA No. 22-A.

MARBLE. All purpose brochure illustrating the many current uses of interior building marble and exterior marble veneer less than 2" in thickness. 8½ × 11. 28 pages. AIA No. 22-A.

MARBLE FORECAST 1959–1960. Identifies Domestic quarry locations listing variety of marbles available from each. Also lists marble importing firms and contains information on foreign marbles. All marbles are classified according to soundness rating. Size restrictions are also given. 8½ × 11. 8 pages. AIA No. 22-A.

Also see 89.

Vermont Marble Company

INTERIOR MARBLE. Illustrated folder including specifications and description of VERMARCO TOILET UNITS. List of interior marbles classified according to colors. 1961. 8½ × 11. 4 pages. AIA No. 22-A.

Also see 3, 29, 66, 89, 117, 120, 142.

91. Marine

The Dow Chemical Company, Styrofoam Division

STYROFOAM: A Guide to the Design of Floating Structures (Form No. 171-162). Properties, advantages and limitations; design and installation information; performance reports; on use of Styrofoam buoyancy billets in floating marine installations. 8½ × 11. 28 pages. AIA No. 32-B (N.N.)

92. Mastics

DAP inc.

CATALOG PAGE. Describes characteristics and use of DAP Twin-T-Mastic. 8½ × 11. 1 page.

SWEET'S INSERT. Covering DAP Caulking, Glazing, Sealing Products with specification information and including information about DAP Technical Service Program for architects.

CATALOG PAGE. Describes characteristics and uses of DAP Twin-T-Mastic Glazing Tape. 8½ × 11. 1 page.

93. Metal Products

The E. F. Hauserman Company, *see 99.*

Indiana Limestone Institute

SHEET METAL PRODUCTS. Catalog 300.

Also see 2, 29, 53, 82, 85, 114.

Inland Steel Products Company

MILCOR SHEET METAL PRODUCTS CATALOG NO. 300. Presents detailed descriptions, installation information, sizes, weights and packing on Milcor Heating and Air Conditioning Products, Milcor Steel and Aluminum Roof Drainage Products, Milcor Steel and Aluminum Louver and Roof Ventilators and Milcor Building Specialties. 8½ × 11. 62 pages.

Pittsburgh Plate Glass Company, *see 63.*

Sanymetal Products Company, Inc., *see 19, 100.*

Wheeling Corrugating Company

STEELCRETE EXPANDED METAL FOR CONCRETE REINFORCING. Technical booklet explaining the use of Wheeling Expanded Metal for reinforcing concrete. Information concerning high bond resistance, distribution of stresses, flexibility in design, economies of using material, and complete design data. Technical data includes six "Live Load" and six "Resisting Moment" tables for various spans. There is also information concerning Steelcrete Expanded Metal 6" × 12" Highway Reinforcing. 2 colors. 16 pages. AIA No. 18-E. WC-122.

STEELCRETE BANK VAULT REINFORCING. Thorough description of Steelcrete System of reinforcing modern bank vaults to resist efforts of man or elements against attack by fire, explosion or earthquake. Explains horizontal and vertical systems of installation. Technical drawings and other specifying information. Features photographs and history of tests made on various types of vault construction. 2 colors. 16 pages. AIA No. 18-E. WC-150-4M.

WHEELING CORRUGATED WALLS FOR WINDOW WELLS. Describes various designs of Wheeling Window Wells made from galvanized corrugated sheet steel. Photographs and line drawings with all dimensions. Also shows Wheeling Expanded Metal Guards to fit over the top opening of the Window Wells. 3½ × 6½. (WC-114)

WHEELING EXPANDED METAL. Shows "creative metal of 1001 uses," Wheeling Expanded Metal being used functionally as well as decoratively in residential, commercial, and industrial installations. Sizes, weights, style designations and other buying information is included. 1960. 8 pages. WC-227.

Also see 2, 6, 19, 45, 53, 67, 82, 99, 114, 118, 130.

93A. Metallic-Coated Steel

Armco Steel Corporation

ARMCO METALLIC–COATED STEELS FOR ARCHITECTURE. A guide for the architectural use and specification of zinc- and

aluminum-coated sheet steels. Basic data on properties, cost, and applications. 1960. 8½ × 11. 12 pages. AIA 12-A-31.

Also see 98, 118, 129, 132.

94. Millwork

Western Pine Association

PRECISION FINGER–JOINTED STOCK. Describes modern finger jointed woodwork stock. Standard W.P.A. rule manufacture of finger-jointed woodwork products is included. 3 × 6. 6 pages.

MIND YOUR MOULDING MANNERS. An "idea-stimulator" showing uses of mouldings in variety of decorative fashions. Also details methods of working with mouldings. Accordion-folder. 4 × 8½.

WP SERIES WESTERN MOULDING PATTERNS. Shows standard moulding patterns. Published jointly by Western Pine Association and West Coast Lumbermen's Association as standard for mills in both areas. Drawings and/or size listings for more than 500 patterns assigned WP numbers. Cross index for 8000 and 7000 series. 8½ × 11. 32 pages. (Punched for ring binder.) AIA No. 19-E-3,

95. Mortars

Portland Cement Association

MASONRY CEMENT MORTARS. Contains technical information including recommendations on proportioning, mixing, placing and proper selection of materials for masonry cement mortars. 8½ × 11. 2 pages.

96. Paint

Benjamin Moore & Company

STANDARD SPECIFICATIONS for Architects covering the application of Benjamin Moore & Co.'s Paints, Varnishes and Enamels. 8½ × 11. 12 pages. AIA No. 25.

National Paint, Varnish and Lacquer Association

CIRCULAR 771. NATURAL FINISHES FOR EXTERIOR WOOD.

CIRCULAR 762. MOISTURE, THE HIDDEN MENACE TO HOMES.

CIRCULAR 763. SOME CONSTRUCTION DEFECTS WHICH PERMIT WATER TO MENACE HOMES.

HOW TO RESCUE YOUR HOME FROM THE MENACE OF MOISTURE.

HOW TO PAINT YOUR WOOD HOME.

EXTERIOR LATEX PAINTS.

INDOOR PAINTING.

OUTDOOR PAINTING.

PAINTING ALUMINUM.

PAINTING ASBESTOS–CEMENT PRODUCTS.

PAINTING GALVANIZED STEEL.

PAINTING HARDBOARD.

PAINTING INSULATING SIDING.

PAINTING INSULATION BOARD.

PAINTING NEW PLASTER.

PAINTING SOUTHERN PINE.

PAINTING SWIMMING POOLS.

PAINTING VINYL WALL FABRICS.

FINISHING HARDWOOD FLOORS.

Pittsburgh Plate Glass Company, *see 63.*

The Tremco Manufacturing Company

TREMCO 102 TEXTURE COATING FOR MASONRY SURFACES. AIA No. 25-C-2.

97. Panels

Allied Chemical Corporation, Barrett Division

PA-1283 PLASTIC PANELS CATALOG. For residential and industrial construction. Illustrated catalog shows corrugated and flat panels, installation details and specifications. 8½ × 11. 8 pages. AIA No. 26-A-5.

Also see 73, 102, 109, 118, 121, 124, 142, 148.

American-Saint Gobain Corporation, *see 29, 63.*

E. L. Bruce Company, *see 57, 58, 138.*

The Celotex Corporation

CEMESTO DESIGN AND CONSTRUCTION APPLICATION DATA FILE 5800. Complete architectural details of Cemesto Panel curtain wall, roof decks, and partitions for use on steel or wood framing. 1961. 8½ × 11. 52 pages. AIA No. 19-D.

BUILD DISTINCTIVE HOUSES WITH CEMESTO PANELS. Comprehensive architectural details for framing walls and roofs of one story houses for proper use of Cemesto Panels. 1961. 8½ × 11. 6 pages.

Also see 2, 43, 74, 113, 121, 148.

The E. F. Hauserman Company, *see 99.*

Indiana Limestone Company, Incorporated

DETAILS OF CONSTRUCTION and usage of Indiana Limestone faced Panels with various insulating materials.

Johns-Manville Sales Corporation

J–M CORRULUX. Translucent, shatterproof fiber glass structural panels for efficient, controlled light transmission. Complete description, physical and chemical properties, specifications, recommended uses and installation details. 1959. 8½ × 11. 8 pages.

JOHNS–MANVILLE ARCHITECTURAL COLORLITH. Structurally strong, integrally colored, asbestos-cement panels for exterior or interior use. Complete description, physical properties, suggested uses. 1960. 8½ × 11. 6 pages.

Kawneer Company, *see 29, 30, 34, 41, 44, 86, 135, 152, 153.*

United States Plywood Corporation

WELDWOOD PLYWOOD AND ALLIED PRODUCTS FOR ARCHITECTURAL DESIGN. Description. Color. 8½ × 11. 8 pages. Form 2131.

ARCHITECTURAL GRADE WELDWOOD. Contains specifications and standard construction details on installing Architectural Grade Weldwood Plywood. 8½ × 11. 40 pages. Form 1034E.

WELDWOOD ARMORPLY. Details of construction and usage of metal faced plywood in commercial and industrial applications. 8½ × 11. 6 pages. Form 1684.

Western Pine Association

ABOUT LUMBER PANELING. Full-color booklet showing ideas for use of sawn lumber paneling to achieve effects with board lines. Also, description of paneling patterns, installation procedures, footage tables. 8½ × 11. 8 pages. AIA No. 19-E-6.

WESTERN PINE PANELING PATTERNS. Standard patterns, Western Pine Association. Full-size profile drawings, with measurements. 17 patterns. (Punched for 3-ring binder.) 8½ × 11. 4 pages.

Wheeling Corrugating Company, *see 2, 6, 19, 45, 53, 67, 82, 93, 99, 114, 118, 130.*

98. Panels, Porcelain

Armco Steel Corporation

ARCHITECTURAL DESIGN WITH PORCELAIN ENAMEL ON ARMCO ENAMELING IRON. Describes advantages of porcelain enamel in curtain wall design; importance of enameling iron base metal; achievements in architecture with porcelain enamel; and porcelain enamel on stainless steel. Full color illustrations, drawings. 1957. 8½ × 11. 28 pages.

Also see 93A, 118, 129, 132.

Caloric Appliance Corporation

SWEET'S ARCHITECTURAL FILE INSERT, 1961 EDITION. Descriptions, illustrations and detail drawings showing applica-

Panels, Porcelain continues—

tions of Calcore panel curtain wall for buildings of all types. Color. 8½ × 11. 8 pages.

CALCORE DETAIL SPECIFICATION SHEETS. Calcore curtain wall detail specification sheets describe and illustrate with line drawings 17 different types of core materials which can be used with exterior porcelain enameled surfacing. 8½ × 11. 40 pages.

Davidson Enamel Products Incorporated, Subsidiary of Fenestra Incorporated

SWEET'S ARCHITECTURAL FILE INSERT, 1961 EDITION. Descriptions, illustrations and detail drawings show application studies of Double-Wall Panels for curtain wall construction and Facing Panels for new construction or modernization. 8½ × 11. 12 pages. AIA No. 15-M-1.

ARCHITECTS FILE OF TYPICAL CONSTRUCTION DETAILS. Complete, recommended and standard specifications for architectural porcelain, plus current design details and descriptions. Also gives minimum and maximum sizes, shapes, etc. 8½ × 11. 15 pages.

ARCHITECTURAL PROCELAIN COLOR GUIDE. Contains imprinted facsimiles of 47 different single colors and 6 different two-color effects available in Davidson Architectural Porcelain. AIA No. 15-M-1.

FULL COLOR BROCHURE OF INSTALLATIONS. Reproductions of color transparencies of recent Davidson installations. Shows use of Double-Wall Panels in curtain wall construction and Facing Panels in new construction and modernization. Special fold-out shows use of both panel types in service station construction. Drawings and details included. 8½ × 11. 10 pages. AIA No. 15-M-1.

"HOW TO TEST ARCHITECTURAL PORCELAIN QUALITY IN YOUR OWN OFFICE." Provides instructions for conducting "commercial" test for porcelain enamel, as recommended by the Quality Development Committee of the Porcelain Enamel Institute. Picture chart for use in grading porcelain enamel on basis of these tests also included. 8½ × 11. 4 pages.

Fenestra Incorporated

FENESTRA PORCELAIN ON ALUMINUM FLUTED WALL PANELS. Insulated or uninsulated. Complete description, details and specifications.

Kawneer Company, *see 29, 30, 34, 41, 44, 86, 135, 152, 153.*

United States Plywood Corporation

WELDWOOD PORC-LIN-PLY. Describes the uses of porcelain-faced plywood panels. Form No. 1761.

99. Partitions

American-Saint Gobain Corporation, *see 29, 63.*

The Celotex Corporation, *see 2, 43, 74, 97, 113, 121.*

Fenestra Incorporated

FENESTRA METAL WALL PANELS & FIRE PARTITIONS. Description, specifications, engineering data.

Fiat Metal Manufacturing Company

FIAT METAL TOILET ENCLOSURES. Complete line, Fiat Metal Toilet Enclosures, Dressing Stalls and Cubicles. Catalog E-600. 1960. 16 pages. AIA No. 35-H-6.

Formica Corporation, Subsidiary of American Cyanamid Company, *see 104.*

The E. F. Hauserman Company

COMPLETE-LINE BROCHURE. Full color "index" of Hauserman's Complete-Line of Movable Interior Wall Systems. Basic features of each system described. Intended as summary reference —not guide for specification writing. 12 pages.

DELINEATOR BROCHURE. Booklet contains benefit story, illustrations of the product and concise details and specifications of basic components. 16 pages.

SIGNATURE BROCHURE. 4-color brochure describing basic product features and applications, design and technical planning data, sound control information, elevations, details and specifications. 32 pages.

DIVIDER-WALL BROCHURE. Illustrates application and product details of this free-standing partition system which can be used to create individual office rooms for increased efficiency in general office areas. 6 pages.

TYPE HP. Technical brochure indicating benefits, features, product details, stock sizes and specifications of this low-cost system.

SERIES CC WALLS BROCHURE. 2-color brochure incorporating Types CCF-CCFH and Types CC-CCH design details, construction features and specifications. 28 pages.

INDUSTRIAL PARTITIONS BROCHURES. 2-color specific-type product literature containing benefits, features, typical installations, partition details, stock sizes and specifications for Hauserman Types H, K, and HK Industrial Partitions. Individual booklets available for Type HK and Type R. 8 pages.

Indiana Limestone Institute, *see 2, 29, 53, 82, 85, 93, 114.*

Johns-Manville Sales Corporation

JOHNS-MANVILLE ASBESTOS MOVABLE WALLS. Full color illustrations, descriptions and construction details of J-M Asbestos Movable Walls prepared specifically for architects' use. 1960. 8½ × 11. 32 pages.

Marble Institute of America, Incorporated, *see 89, 90.*

The Mills Company

"ALUMINUM SERIES" PARTITIONS. Full color illustration of handsome Mills aluminum office partitions, including construction details and specification data.

MOVABLE WALL PLANNING KIT. Full color presentation including concise data on Mills office partitions and aids for planning efficient office interiors.

MILLS "MAINLINER" BROCHURE. Illustrates "Mainliner" free-standing office partitions used for efficient and attractive subdivision of general office areas, etc. 3 color. 8½ × 11. 6 pages.

MILLS MOVABLE WALLS FOR SCHOOL BUILDINGS. Detailed floor plans of a modern high school show *how* and *where* Mills walls are used to keep its interiors permanently efficient and goodlooking. 8½ × 11. 4 pages.

MILLS MOVABLE WALLS—CATALOG 61-OP. Comprehensive description and data on seven types of metal office partitions. Applications, architectural details, specifications, accessories, wall linings, and other technical information. 8½ × 11. 32 pages.

MILLS COLOR PORTFOLIO. Contains color illustration series of outstanding office interiors, designed with 1961 styles of Mills Movable Walls. Current installations, completely furnished and decorated. 8½ × 11.

MILLS MOVABLE WALLS GIVE YOU SPACE CONTROL. Illustrated brochure describes the movability advantages of Mills Movable Wall components, engineered for future utility and flexibility requirements. Construction details and practical applications. 8½ × 11. 6 pages.

MILLS MODERNIZATION FOLDER. Factual considerations of movable walls vs. "fixed" wall construction in modernization of buildings and offices. Discusses change-frequencies, descriptions, appearances, ease of alteration, relative costs, etc. 10 × 14. 12 pages.

Also see 143.

New Castle Products, Inc., Modernfold Partitions

SOUNDMASTER 240. Full color booklet on the new Modernfold sound-insulated partition with steel panel construction. Detailed construction information and sound reduction data. 5 pages.

HEAVY DUTY PARTITIONS. Full color booklet detailing the requirements for heavy duty partitions, comparing heavy-duty Modernfolds with industry standard construction. 4 pages.

FOLDING PARTITIONS. Full color booklet on Modernfold construction and installations. 16 pages.

Penn Metal Company, Incorporated

7 PENMETAL PARTITION SYSTEMS. Illustrates and describes seven different types of permanent partitions. Gives material and erection specifications and sound transmission loss rating for each. Also includes tables for spacing of supports, maximum partition heights, and fire resistive ratings. 20 pages.

NAILABLE STEEL STUD PARTITION SYSTEM. Describes a new system for the low-cost erection of non-bearing partitions. Known as *Permalock* it consists of nailable steel studs, track and

bridging and necessary washers. Collateral materials such a metal lath, gypsum lath or virtually any type of panel can be secured to the studs as simply as to wood ones. A nailing device bites the nail or screw with a grip designed to prevent loosening. Folder includes dimensions and drawings showing method of attaching collateral materials.

HUSH CLIP PARTITION SYSTEM. A new partition system, designed to minimize the transmission of sound from room to room. Components—steel track and studs, the new Hush clips, pencil rod and metal lath—are illustrated and described. Included are details of the test, by an independent research laboratory, which established a sound loss rating of 56.4 decibels for the partition.

PENMETAL MOVABLE INTERIOR PARTITIONS. Catalog covering new movable partitions, which are built around a single modular framing system to which a variety of paneling can be attached. Includes descriptions of the steel panels, furnished with baked enamel finishes in a variety of decorator's colors; hardwood panels; unpainted plywood and gypsum wallboard. Also includes illustrations of all the basic parts used in the partitions, specifications, and elevation and section drawings. Details of doors, glass and hardware are given. AIA No. 35-H-6.

Also see 42, 61, 67, 82, 113.

Pittsburgh Plate Glass Company, *see 63.*

Rolscreen Company

PELLA WOOD FOLDING PARTITIONS. SWEET'S REPRINT. Information, description, photos and details of folding partition with 10⅜" × 1 1/16" panels in 6 veneers. 1961. 8½ × 11. 8 pages. AIA No. 35-H-6.

Simpson Timber Company

SUDDENLY IT'S A NEW ROOM. SAIMP-019/4917B. Paneling and partition units, combined with Forestone acoustical ceiling, offer a completely prefinished, integrated remodeling or building package that is both economical and quickly installed. 8½ × 11. 8 pages. AIA No. 23-L.

MOVABLE PARTITIONS. SACMP-010/5035. Complete information, including application details, on new partition material. 8½ × 11. 8 pages. AIA No. 35-H-6.

Stran-Steel Corporation

NAILABLE STEEL or punched channel stud wall partitions. Light weight, low cost. Sweet's Catalog File 13-G.

Unistrut Products Company

NO. 920 COLORLINE PARTITION CATALOG. New, complete, depicts custom appearance available at low cost by the use of ColorLine partitions. Stresses such features: numerous styles and combinations; unlimited freedom of panel, glass and color selection; flexibility; movability; provision for wiring requirements, and others. Full technical details and specifications. Variety of installation photos. 1960. 8½ × 11. 28 pages, plus 6 page, full color gate-fold cover. AIA No. 35-H-6.

P-2 MAILER. New full color accordion fold presentation of ColorLine movable partitions. 10 full-page color photographs show the smart customer appearance achieved with ColorLine partitions at budget-minded prices. 1960. 8 × 5½. 12 page accordion fold.

NO. 301 ULTRA CLEAN ROOMS. Covers the use of metal framing for construction of ultra clean rooms for precision manufacturing, assembly and laboratory areas. 1959. 8½ × 11. 4 pages.

NO. 904 SWEET'S INSERT ON COLORLINE PARTITIONS. Basic technical data on ColorLine Movable Partitions with specifications and description of features. Color photos of partition installations on covers. 1959. 8½ × 11. 8 pages. AIA No. 35-H-6.

United States Plywood Corporation

WELDWOOD PARTITIONS AND MOVABLE PARTITION PANELS. Contains details and technical data on Weldwood Partitions and Movable Partition Panels. 8½ × 11. 12 pages. Form No. 2012.

Vermiculite Institute, *see 147.*

Wheeling Corrugating Company

EXPANDED METAL INDUSTRIAL PARTITIONS. Features Expanded Metal Partitions and descriptions of choices of angle frame panels, doors, and locks, along with specifications and other buying data. 1960. 2 colors. 4 pages. AIA No. 14-M. WC-238-A.

Also see 2, 6, 19, 45, 53, 67, 82, 93, 114, 118, 130.

100. Partitions, Toilet

Carthage Marble Corporation

STALLPACK, SWEET'S ARCHITECTURAL FILE INSERT, 1961 EDITION. Shows suspended and floor mounted installations of this complete, prefabricated marble toilet enclosure. Photographs and complete description of non-ferrous hardware. Detail drawings and specifications.

Sanymetal Products Company, Incorporated

TOILET COMPARTMENTS, SHOWER STALLS, HOSPITAL CUBICLES, CATALOG NO. 98. Illustrates modern toilet room environments, several types of toilet compartments, shower stalls, and hospital cubicles; announces new material available for toilet compartments; complete specifications for each product; details of toilet and shower installation included for guidance of architects and engineers; complete listing of Sanymetal representatives by states and cities for quick reference. 1961. Color. 8½ × 11. 16 pages. AIA No. 35-H-6.

Vermont Marble Company, *see 3, 29, 66, 89, 90, 117, 120, 142.*

101. Pass Windows

S. H. Pomeroy Company, *see 7, 14, 70, 80, 152.*

Security Fire Door Company, *see 80.*

102. Plaster

Allied Chemical Corporation, Barrett Division

P-1148 GYPSUM PRODUCTS FOLDER. Concise, informative summary of Barrett Gypsum Products, giving uses and specifications. 8½ × 11. 4 pages.

G-1259 BETTER INTERIOR WALLS WITH GYPSUM LATH AND PLASTER. Outlines the benefits of Gypsum lath, insulating lath, cement plaster. Bar-O-Lite plaster and gauging plaster. 8½ × 11. 6 pages. AIA No. 21-A-2 and 20-B-2.

Also see 73, 97, 109, 118, 121, 124, 142, 148.

The Celotex Corporation, *see 2, 43, 74, 97, 113, 121.*

National Paint, Varnish & Lacquer Association

PAINTING NEW PLASTER.

Vermiculite Institute, *see 147.*

103. Plastic, Acrylic

Rohm & Haas Company

PLEXIGLAS IN ARCHITECTURE (PL-362). Brochure showing examples, mostly in color, of acrylic plastic used for lighting, glazing, skylights, murals, signs, spandrels, and other architectural applications. 1959. 10 × 12. 20 pages.

PLEXIGLAS IN ARCHITECTURE (PL-446). Data bulletin giving detailed information about Plexiglas as an architectural material. Lists types, sizes, thicknesses; describes properties; gives installation details for skylights, glazing, spandrels, lighting, signs, 1960. 8½ × 11. 20 pages.

104. Plastic, Laminate

Formica Corporation, Subsidiary of American Cyanamid Company

ACCENT DESIGNS. Fifteen exclusive designs are illustrated in full-color insert, including 11 tabletop motifs and four over-all designs for matching tables and walls. 8½ × 11. 2 pages.

FORMICA DOORS. Includes complete application features, construction details and specifications of Formica's flush doors, manufactured for commercial and institutional interiors. Describes factory pre-mortising, trouble-free operation, practical and decorative qualities of laminated plastic surfacing, long-range economy of installation and maintenance and Formica's five-year guarantee against defects of material or workmanship. Sales and service outlets are listed. 8½ × 11. 4 pages. AIA No. 19-E-13.

MODERN FORMICA INTERIORS. Shows 13 commercial and institutional interiors in full color, with applications of Formica laminated plastic from office partitions to hospital cabinets to

Plastic Laminate continues—

theatre ticket booths. Contains paper reproductions of Formica colors, patterns and woodgrains. Explains and shows examples of Formica decorative art, custom service for murals, corporate emblems and accent panels. Color. 8½ × 11. 12 pages.

NEW DIMENSIONS IN DECORATIVE ART. Illustrated booklet, outlines Formica Corporation's custom decorative art service of murals, designs and art treatments sealed for permanent beauty in laminated plastic. Tthree processes are described: artlay, inlay and original paintings. Costs of typical custom designs are also included. 8½ × 11. 8 pages.

United States Plywood Corporation

WESTINGHOUSE MICARTA ARCHITECTS REFERENCE MANUAL. Complete details on Micarta plastic laminate. 8½ × 11. 22 pages. Form No. 1666.

105. Plumbing

Bradley Washfountain Company

TECHNICAL MANUAL. Water consumption, roughing in dimensions.

6004 CATALOG. Complete catalog of group washroom equipment. AIA No. 29-H.

Josam Manufacturing Company

CATALOG K. Plumbing drainage products. Illustrations, specifications, detailed drawings and installation diagrams. 1960. 8½ × 11. 236 pages. AIA No. 29-C.

MANUAL SK-2. Specifications and roughing-in dimensions on drains and chair carriers for every requirement, as a reference guide for field or office use. 1960. 5¼ × 6¾. 256 pages. AIA No. 29-C.

MANUAL SP-7. Product illustrations, detailed drawings, illustration diagrams of typical swimming pools. 1960. 8½ × 11. 26 pages. AIA No. 35-F-2.

MANUAL S. Water hammer cause and cure. 1960. 8½ × 11. 12 pages. AIA No. 29-D-8.

CATALOG CL. Illustrations, descriptions, dimensional information and application of cleanout plugs and covers. 1959. 8½ × 11. 18 pages. AIA No. 29-C-31.

PRICE LIST L. Easily identified sections including illustrations, roughing dimensions, applications, specifications and list prices of standard and optional features of every Josam Product. 8½ × 11. 144 pages. 1960. AIA No. 29c.

Also see 106.

106. Plumbing Fixtures & Accessories

Josam Manufacturing Company

CATALOG F-2. Illustrations, specifications and recommendations for Closet Carriers and Closet Fittings; Carriers for Urinals, Lavatories, Sinks, Hospital Fixtures, including Residential Carriers and other Wall-hung Fixtures. 1960. 8½ × 11. 28 pages. AIA No. 29-H-8.

MANUAL FD-3. Selection Chart of Wall-hung Fixtures with recommended Carriers, giving Fixture Manufacturers' names and Catalog Numbers. 1959. 8½ × 11. 12 pages. No. 29-H-8.

MANUAL S. The cause and cure of water hammer in supply lines. Complete with illustrations, specifications, installation diagrams, sizing information, piping layouts. 1959. 8½ × 11. 12 pages. AIA No. 29-D-8.

Stylon Corporation

Full line of vitreous china bathroom accessories (and ceramic wall and floor tile). Design service available. Complete catalog and special architects' portfolio can be had on request.

107. Plywood

E. L. Bruce Company, *see 57, 58, 138.*

Georgia-Pacific

GEORGIA–PACIFIC BUILDING AND INDUSTRIAL PRODUCTS. Complete catalog: specification and price information on decorative plywoods, including factory finished, textured and hardwood; fir, GPX overlaid, siding and sheathing. 8½ × 11. 56 pages. Form AP-3.

Simpson Timber Company

SIMPSON PLYWOOD CATALOG. SPDMP-025/4915. Description and color illustration of Simpson plywoods including plywood specialties. 8½ × 11. 16 pages. AIA No. 23L.

SIMPSON HIGH DENSITY OVERLAID PLYWOOD. SPDMP-82/2485. Description and uses of Kimpreg-overlaid plywood. 8½ × 11. 4 pages. AIA No. 4-D-2.

SIMPSON MEDIUM DENSITY OVERLAID PLYWOOD PDMP-81/2486. Description and uses of Crezon-overlaid plywood. 8½ × 11. 4 pages. AIA No. 19E.

LIFECLAD PREFINISHED PLYWOOD AND DOORS. SPDMP-013/4020. Description and color illustrations of Lifeclad finishes. 8½ × 11. 4 pages.

United States Plywood Corporation

WELDWOOD TEXTURED WALL PANELING. Description, illustration and installation data. Color. 8½ × 11. 8 pages. Form No. 1825.

THE WELDWOOD CATALOG. Complete information on the entire line of Weldwood building materials. 8½ × 11. 38 pages. Form No. 1902.

WELDWOOD FOR BUSINESS INTERIORS. Ideas on the application of Weldwood products in business and institutional installations. Form No. 1651.

108. Power Tools

Ramset Fastening System, Winchester-Western Division, Olin Mathieson Chemical Corporation, *see 45.*

Remington Arms Company, Incorporated,
Subsidiary of E. I. Du Pont De Nemours and Company

BUILDING FOLDER. A cutaway view of a building in which over fifty typical Stud Driver applications are shown. Stud recommended for the application is also illustrated. (Form No. BSD 175-1).

STUD DRIVER CATALOG. Describes and illustrates the entire line including studs, loads, special guards and accessories. (Form No. ASD-01).

APPLICATION BOOKLET. Recommends the correct stud-load combination for all types of fastening. (Form No. ASD-35).

CAPTIVE STUD DRIVER SHEET. Complete information on the Remington Stud Driver with the exclusive Captive Stud guard assembly designed to prevent free flight of studs through any structural material.

TECHNICAL BULLETINS:
Pull-out Resistances of Studs in Concrete and Steel.
Shear & Tensile Strengths of Remington Studs.
Pull-out Resistances of Steel-Type Studs.
Guide to Use of Remington Studs in Various Metals.
Corrosive Resistances of Remington Studs.
Remington Discs.
Effects of Vibration upon Pull-Out Values.
Effect of Torque or Wrench pull on Remington Studs.
Pull-out Resistances of ⅜" Studs with "Captive Stud" Kit.

109. Preservative Treatment

Allied Chemical Corporation, Barrett Division

P-1031 "CARBOSOTA" (CREOSOTE) WOOD PRESERVATIVE FOLDER. Describes how "Carbosota" Wood Preservative, an all coal-tar creosote oil, adds years of life to wooden structures and repels insects from animal enclosures. 2 color. 8½ × 11. 4 pages.

P-1276 WATERPROOFING AND DAMPPROOFING MANUAL. Illustrated manual on protective coatings for dampproofing against seepage of moisture not under hydrostatic pressure, and waterproofing against leakage under hydrostatic pressure. 8½ × 11. 8 pages. AIA No. 7-A-1 and 7-B-2.

P-1277 PROTECTIVE COATINGS CATALOG. Aluminum coating and other coatings for roofs, masonry, metalwork, equipment, pavement and wood. 8½ × 11. 4 pages. AIA No. 7-B-2.

Also see 73, 97, 102, 118, 121, 124, 142, 148.

Koppers Company, Incorporated

SPECIFICATION FOLDER FOR CREOSOTE TREATMENT.

Complete specifications and description of coal tar creosote for wood preservation. Illustrated. 4 pages. Koppers No. T89-A.

The Tremco Manufacturing Company

TREMCO TRANSPARENT PRESERVATIVES FOR MASONRY. AIA No. 7-B-2.

TREMCO 102 TEXTURE COATING. AIA No. 25-C-2.

United States Plywood Corporation

WELDWOOD WOOD PRESERVATIVE. Prevents decay, rot, mildew, kills termites. Enclosure describes uses and coverage. 2 color. 3¼ × 6¼. 2 pages. Envelope.

Western Pine Association

"PERMATOL." A preservative treatment for exterior millwork. (Research Note No. 2.221). Approved formulas, recommended methods of application of Pentachlorophenol, leading colorless wood preservative treatment developed by Western Pine Association laboratory. 8½ × 11. 8 pages.

110. Putty

DAP inc.

CATALOG PAGES. Describe DAP Putties of all types and colors and applications; including DAP Metal Sash, DAP Wood Sash, DAP Casement. 8½ × 11. 4 pages.

SWEET'S INSERT. Covering DAP Caulking, Glazing, Sealing Products with specification information and including information about DAP Technical Service Program for architects.

National Paint, Varnish & Lacquer Association

CIRCULAR 735. FACTS ABOUT GLAZING.

111. Racks, Steel

Unistrut Products Company

NO. 620 RACK CATALOG. New, colorful catalog emphasizing maximum utilization of the cube through use of UNISTRUT. Sections devoted to racks for pallets, skids, automotive parts, die and bar stock, displays, general storage, and a selection of the numerous miscellaneous applications. Simple assembly instructions, basic rack designs, etc. 1960. 8½ × 11. 24 pages. AIA No. 35-i-15. *Available from Distributors in all principal cities who stock UNISTRUT and offer engineering service.*

112. Raised Floor System

Michael Flynn Manufacturing Company

LUPTON RAISED FLOOR SYSTEMS. Describes advantages of the Lupton Raised Floor System for Electronic Data Processing Centers. 4 pages. AIA No. 17-A.

113. Roof Construction

Allied Chemical Corporation, Barrett Division, *see 73, 97, 102, 109, 118, 121, 124, 142, 148.*

The Celotex Corporation

TECHNICAL SERVICE DATA NO. 1. ROOF DECKS. Comparison of spans, weights, U-values, and costs of types of roof decks in common use. 1961. 8½ × 11. 4 pages. AIA No. 4, 10, 13, 37-A.

ARCHITECT SPEC. NO. 60. POURED IN PLACE GYPSUM ROOF DECKS. Description and uses, specifications, construction details, and technical data. 1961. 8½ × 11. 4 pages. AIA No. 4-L.

Also see 2, 43, 74, 97, 121, 148.

Granco Steel Products Company

TUFCOR. Catalog BT-593. Description, specifications. Top grade fire resistant roof construction. Excellent vapor barrier keeps insulation dry. Fits any framing layout.

ROOF DECK. Catalog D-591. Description, selection information. Longer sheets and wide rib openings make Granco Roof Deck easy to lay and weld. Flint hard enamel finish resists corrosion and abrasion. In place, the Deck provides a strong working platform for building trades and protection for workers below.

UTILITY DECK. Catalog U-601. Describes and illustrates uses, specifications, and details. This multi-purpose, light gage deck was specifically designed for short span construction.

Indiana Limestone Institute, *see 2, 29, 53, 82, 85, 93, 114.*

National Lumber Manufacturers Association

RANDOM LENGTH WOOD DECKING. (No. 2 in new Wood Construction Data series.) Provides design data on the use of 2-inch, nominal thickness, wood decking in random lengths with unsupported end joints. Cites savings in time and materials. 1959. 2 colors. 8½ × 11. 8 pages. AIA No. 19-D.

Penn Metal Company, Incorporated

PENMETAL GALVANIZED STEELDEK. Describes a new steel roof decking or sidewall "skin" material, developed primarily for use with Penmetal LIGHTSTEEL framing. Includes: specifications, dimensions, and tables for safe uniform loads and physical and structural properties. Application of the decking to Penn Metal nailable joists is illustrated. 4 pages.

Also see 42, 61, 67, 82, 99.

Portland Cement Association

ROOFS WITH A NEW DIMENSION. Brief explanation of the structural action of shells, together with descriptions of the characteristics of four major types of concrete shell roofs: barrel, folded plate, dome and hyperbolic paraboloid. Photographs of many shell roofed buildings, both foreign and American. 6 × 9. 20 pages.

Timber Structures, Incorporated, *see 62.*

Vermiculite Institute, *see 147.*

Wheeling Corrugating Company, *see 2, 6, 19, 45, 53, 67, 82, 93, 99, 114, 118, 130.*

114. Roof Construction Systems

Allied Chemical Corporation, Barrett Division, *see 73, 97, 102, 109, 118, 121, 124, 142, 148.*

Armstrong Cork Company

HOW TO BUILD WITH ARMSTRONG ROOF DECKS. Complete information on Armstrong Roof Deck types, selection, planning, and building. Physical test data also included. 1959. 8½ × 11. 28 pages. AIA No. 37-B-2.

ARMSTRONG F/A* ROOFING CATALOG. Provides complete information on new (A)rmstrong *Fluid Applied Roofing including application techniques and physical characteristics. 1961. 8½ × 11. 12 pages. AIA No. 12A.

SPECIFICATIONS—Armstrong F/A Roofing. Individual unabridged architects' specifications for F/A roof material and installation. 1961. 8½ × 11. 12 pages.

INSTALLATION INSTRUCTIONS TO THE CONTRACTOR. Consists of complete installation and tool instructions to contractors, on Armstrong F/A Roofing. 1961. 8½ × 11. 8 pages.

Also see 2, 55, 58, 77, 116, 149.

Fenestra Incorporated

FENESTRA HOLORIB ROOF DECK. Provides smooth working surface, high strength, interlocking construction. Specifications and design information.

FENESTRA ECONORIB ROOF DECK. Designed to sustain normal roof loadings at minimum cost. Design data and loading tables.

FENESTRA FENTURA ROOF DECK SYSTEM. New "LS" deck for long span construction. Feature flat top plates, recessed lighting and acoustical treatment. Catalog provides details and specifications.

FENESTRA "D" PANEL ROOF SYSTEM. Long span cellular panel with integrated acoustics and recessed lighting troffers available. Specifications and design information.

Indiana Limestone Institute

ROOF SYSTEMS. Catalog 248.

Also see 2, 29, 53, 82, 85, 93.

Inland Steel Products Company

INLAND STEEL ROOF SYSTEMS MANUAL, CATALOG NO. 248. Fully describes all Inland roof systems, including seven types of steel roof deck and Acoustideck and three types of Ribform poured construction. A handy selection chart compares all systems according to spans and strength/wt. ratios and shows the most economical choice for use on any job. Data charts, details, con-

Roof Construction Systems continues—

struction procedures and suggested architectural specifications. 8½ × 11. 24 pages. AIA No. 12-C.

Timber Structures, Incorporated, *see 62.*

Vermiculite Institute, *see 147.*

Wheeling Corrugating Company

WHEELING SUPER-RIB STEEL DECKS. Two new, improved steel roof decks, Types A and B, are presented for the first time. Both styles are Bonderized and roller coat painted to insure added protection, come in 2'-0" covering widths, with maximum sheet lengths controlled only by shipping limitations. 21 important advantages are featured along with: tables for safe total uniform loads; physical properties; installation data; suggested specifications; fire resistive ratings; insulating values; and other information. 1960. 2 color. 8 pages. AIA No. 12-C. WC-241.

Also see 2, 6, 19, 45, 53, 67, 82, 93, 99, 118, 130.

115. Roof Decking, Heavy Timber

Timber Structures, Incorporated, *see 62.*

116. Roof Insulation

Allied Chemical Corporation, Barrett Division, *see 73, 97, 102, 109, 118, 121, 124, 142, 148.*

Armstrong Cork Company

ARMSTRONG ROOF INSULATIONS. Complete description of Armstrong Temlok (regular and asphalt-impregnated) roof insulation with specifications for their application. 1961. 8 pages. 8½ × 11. AIA No. 37-B-2.

Also see 2, 55, 58, 77, 114, 149.

The Celotex Corporation, *see 2, 43, 74, 97, 113, 121.*

The Dow Chemical Company, Plastic Sales Department

ROOFMATE: ROOF INSULATION (Form No. 157-56). Properties, specifications and complete installation instructions for industrial and commercial built-up roofs. 8½ × 11. 4 pages. AIA No. 37-B-2.

Johns-Manville Sales Corporation

JOHNS-MANVILLE ROOF INSULATION. Heat transfer charts, specifications for application and description of the various types of J-M roofinsul fiberboard roof insulation. 1960. 8½ × 11. 6 pages.

JOHNS-MANVILLE FESCO BOARD. Description, physical data, heat transmission chart and specifications for use of this perlite insulation board. 1960. 8½ × 11. 4 pages.

Pittsburgh Plate Glass Company, *see 63.*

Vermiculite Institute, *see 147.*

117. Roof Treatments

Allied Chemical Corporation, Barrett Division, *see 73, 97, 102, 109, 118, 121, 124, 142, 148.*

National Paint, Varnish & Lacquer Association

CIRCULAR 765. ROOF COATING MANUAL.

CIRCULAR 782. PAINT AS A HEAT REFLECTOR.

The Tremco Manufacturing Company

TREMCO ROOF PRESERVATIVE. AIA No. 12-A-12; 25-B-27.

TREMCO ROOFCLAD ROOF PROTECTION SYSTEM. No. U5269C.

METHODS FOR ALUMINIZING ROOFS. AIA No. 25-B-34.

Vermont Marble Company

VERMARCO WHITE-ROOF MARBLE ROOFING AGGREGATE. Describe roofing granules, physical properties, application. Illustrated. 8½ × 11. 2 pages. AIA No. 23-E.

Also see 3, 29, 66, 89, 90, 120, 142.

Wheeling Corrugating Company, *see 2, 6, 19, 45, 53, 67, 82, 93, 99, 114, 118, 130.*

118. Roofing

Allied Chemical Corporation, Barrett Division

P-1120 SHINGLE BROCHURE. Discusses each Barrett shingle style in detail. Full color photographs and illustrations. Handsome guide to shingle buying. 9 × 12. 28 pages.

"BAR-FIRE," CLASS "A" SHINGLE FOLDER. Describes and illustrates Barrett's premium 300#, Class "A" Fire-Rating shingle.

ARCHITECTS' & ENGINEERS' REFERENCE MANUAL FOR 1960. Specifications on Built-Up-Roofing, Flashings, Waterproofing, etc., brought up-to-date for 1960. Complete, authoritative. Modern illustrations and designs. 8½ × 11.

B-1135 B.U.R. FOLDER. Illustrates and explains exactly what a Barrett Built-Up-Roof is. Color. 8½ × 11. 6 pages.

B-1059 "SPEAKING OF FLAT ROOFS" BOOKLET. Stresses dangers of a neglected roof, importance of periodic check-ups, etc. Attached reply card. 2 colors. 3½ × 6.

B-1223 QUARTER-CENTURY ROOF BOOKLET. Distinguished booklet describing the Barrett "Specification" Roof, latest advance in built-up-roofing. 8½ × 11. 4 pages.

B-1279 BUILT-UP ROOFING MANUAL. Detailed specifications for roof insulation, pitch and felt roofs, asphalt and felt roofs, flashings, drainage and vent systems. Illustrated. 8½ × 11. 52 pages. AIA No. 12-B.

P-1278 ROOFING SHINGLES CATALOG. Features Bar-Fire fire-safe shingles, Storm-King self-sealing shingles, Weather-Bar standard 3-tab shingles and ten other Barrett shingles. 8½ × 11. Illustrated in color. 8 pages. AIA No. 12-B-2.

B-1296 BUILT-UP ROOFING PRODUCTS. Describes product availability of pitch and felt, asphalt and felt, roof insulation, coatings, drains. 8½ × 11. 6 pages. AIA No. 12-B.

F-1217 "RIGIDWALL" SHEATHING FOLDER. Describes advantages of high density, nailable wood fibre sheathing board. Weather tight wall and firm base for the application of wood-siding, asbestos-cement or wood shingles, stucco, masonry veneer or other exterior finishes. 8½ × 11. 4 pages. AIA No. 19-D-3.

F-1273 ROOF INSULATION (FIBERBOARD) CATALOG. For permanent insulation under built-up roofings, over concrete, gypsum, steel or wood deck. 8½ × 11. 4 pages. AIA No. 37-B-2.

B-1301 URETHANE ROOF INSULATION. Describes new high efficiency roof insulating material, with roofing cap sheet and flame-retardant coating, 8½ × 11. 4 pages. AIA No. 37-B-2.

Also see 73, 97, 102, 109, 121, 124, 142, 148.

Armco Steel Corporation

ARMCO DEEP CORRUGATION. Maximum combination of strength and economy means greater load carrying capacity, lighter sheet gages, fewer purlins, less cost. Available in aluminum-coated or zinc-protected steel. 1958. 8½ × 11. 4 pages.

Also see 93A, 98, 129, 132.

The Celotex Corporation, *see 2, 43, 74, 97, 113, 121.*

The Georgia Marble Company

WHITE TOP MARBLE BUILT-UP ROOFING AGGREGATE. A concise full-color booklet illustrating and describing the practical and aesthetic of White Top, the original marble roofing aggregate produced from Georgia Crystalline Marble. 8 pages. 3⅝ × 8⅜.

Also see 134, 143.

Johns-Manville Sales Corporation

SPECIFICATION MANUAL JOHNS-MANVILLE BUILT UP ROOFS. Detailed and complete specifications of the various J-M Built-Up Roofs prepared specifically for architects' use. Illustrated. 1958. 8½ × 11. 24 pages.

JOHNS-MANVILLE ASBESTOS ROOF SHINGLES. Description and color charts of J-M Colorbestos American Colonial and Salem rigid asbestos roof shingles. 1958. 8½ × 11. 4 pages.

JOHNS-MANVILLE SEAL-O-MATIC ASPHALT SHINGLES. Description and full-color illustrations of these patented self-sealing asphalt roofing shingles. 1958. 8½ × 11. 6 pages.

Koppers Company, Incorporated

1961 SPECIFICATION MANUAL FOR ARCHITECTS AND ENGINEERS. Catalog and specifications, covering application of

coal-tar pitch and tar saturated felt in built-up roof construction. Includes recommended specifications, diagrams and requirements for bonding, waterproofing, dampproofing, roof insulation and flashings. 28 pages. AIA No. 12-B.

Vermont Marble Company, *see 3, 29, 66, 89, 90, 117, 120, 142.*

Wheeling Corrugating Company

WHEELING CORRUGATED ROOFING AND SIDINGS. Gives buying information for heavy zinc-coated steel, 1¼, 2, and 2½ inch, Corrugated Roofing and Siding. Shows Corrugated Ridge Roll, End and Sidewall Flashings, plus other accessories, and Galvanized Seamless Roll Roofing. WC-235.

WHEELING 5-V CRIMP GALVANIZED ROOFING. Gives builder of all types of light constructed buildings information about Wheeling's outstanding 5-V Crimp Roofing, made from Wheeling Cop-R-Loy (copper-bearing) or open hearth quality galvanized steel. Features a special design with an improved end lap for water tight edges. Gages, widths, and lengths are shown, along with accessories and Wheeling's Galvanized Seamless Roll Roofing. WC-230.

WHEELING SUPER CHANNELDRAIN COP–R–LOY ROOFING. Shows advantages of Wheeling's famous Super Channeldrain Cop-R-Loy Galvanized Roofing, its exclusive type of lap construction and drain channel to protect a building's interior against heavy rains and other weather conditions, and how it is applied. Includes: roofing table to help determine quantity of sheets needed and descriptions of the accessories. WC-229.

Also see 2, 6, 19, 45, 53, 67, 82, 93, 99, 114, 130.

119. Screens

Fenestra Incorporated

GUARD SCREENS. Complete details, specifications and installation data on steel and aluminum Detention and Protection type Psychiatric Guard Screens. Inside guard screens for use with Fenestra or other make windows.

Pittsburgh Plate Glass Company, *see 63.*

120. Sealants

DAP inc.

DAP FLEXISEAL LIQUID POLYMER SEALANTS FOR CAULKING, GLAZING, SEALING. Performance data, recommended applications and specifications including information on Flexiseal Primer.

SWEET'S INSERT. Covering DAP Caulking, Glazing, Sealing Products with specification information and including information about DAP Technical Service Program for architects.

DAP CAULKING, GLAZING, SEALING PRODUCTS. Sweet's Catalog Insert.

National Paint, Varnish & Lacquer Association

CIRCULAR 770. CAULKING COMPOUND MANUAL.

The Tremco Manufacturing Company

TREMCO LASTO–MERIC. AIA No. 7-D; 24-A; 26-A-51.

TREMGLAZE MASTIC GLAZING COMPOUND. AIA No. 26-B-2.

TREMCO 525 NON–SKINNING SEALANT. AIA No. 26-B-2; 26-A-51.

1961 GLAZING SPECIFICATIONS for vision glass for aluminum sash, insulation glass in aluminum sash, steel sash and wood sash. Self contained brochure contains information to provide a sound basis for the evaluation of all significant factors bearing on the requirements of the glazing sealants to be used on any given job, to insure adequate security of performance at minimum cost. 8½ × 11. 12 pages.

Vermont Marble Company

TRI–SEAL. Penetrating preservative for Marble, Granite, Terrazzo, Wood, Linoleum, Terra Cotta, Slate, Concrete, Cork & Tile. 8½ × 11. 4 pages.

121. Sheathing

Allied Chemical Corporation, Barrett Division

F-1170, INSULATING SHEATHING FOLDER. Gives descriptions, uses, advantages, specifications, and application directions of Insulating Sheathing and Insulating Shingle Backer. 8½ × 11. 4 pages.

F-1217, "RIGIDWALL" SHEATHING FOLDER. Gives a complete yet concise summary of specifications for Barrett's new, high-density fiberboard sheathing product. 8½ × 11. 4 pages.

G-1190, GYPSUM SHEATHING FOLDER. Comprehensive folder giving specifications, advantages, and application data on Barrett Gypsum Sheathing. 8½ × 11. 4 pages.

Also see 73, 97, 102, 109, 118, 124, 142, 143.

American-Saint Gobain Corporation, *see 29, 63.*

The Celotex Corporation

ARCHITECT SPEC. NO. 10, CELOTEX INSULATING SHEATHING. Description, recommended uses, physical properties and application specifications. 1961. 8½ × 11. 4 pages. AIA No. 19-D-3.

PRODUCT DESCRIPTIVE PAGE, CELOTEX STRONG–WALL INSULATING SHEATHING. High-strength and nail-holding features. Application details. 8½ × 11. 1 page.

Also see 2, 43, 74, 97, 113, 148.

Georgia-Pacific

GEORGIA–PACIFIC SHEATHING AND SIDING PRODUCTS. Specifications G–P Guaranteed Premium Sheathing (Plywood). Also contains information on special siding materials. 8½ × 11. 8 pages. Form AP-2.

Johns-Manville Sales Corporation

JOHNS–MANVILLE STRONGBOARD INSULATION BOARD SHEATHING. Illustrations, application details and advantages of this strong, multi-purpose sheathing and sidewall material. 1957. 8½ × 11. 4 pages.

122. Shower Bath Floors

Fiat Metal Manufacturing Company

FIAT PRECAST FLOORS. Technical data on Fiat precast floors for built up shower stalls of ceramic, plastic or metal tile, marble, plaster, slate, etc. 1960. 8½ × 11. 4 pages. AIA No. 35-H-6.

The Mosaic Tile Company, *see 21.*

National Terrazzo and Mosaic Association, *see 141.*

123. Shower Cabinets

Fiat Metal Manufacturing Company

FIAT SHOWER CABINETS. Fiat sanitary leak and rust-proofed shower cabinets with precast floors. Fiat precast floors for enclosure with tile, slate, marble, plaster walls, etc. Fiat PreHung Enclosures and Doors. Catalog No. P-60. 8½ × 11. 32 pages. AIA No. 35-H-6.

Sanymetal Products Company, *see 19, 100.*

124. Siding

Allied Chemical Corporation, Barrett Division

ALCOA ALUMINUM SIDING BROCHURE. Full-color brochure describing uses and advantages of Alcoa Aluminum Siding and Siding Accessories in the home. Includes complete color guide and installation information. Illustrated. 8½ × 11. 4 pages.

ALCOA ALUMINUM SIDING INSTALLATION MANUAL. Outline of complete installation directions for Alcoa Aluminum Siding and Siding Accessories. Illustrated. 8½ × 11. 6 pages.

ALCO ALUMINUM SIDING COLOR HARMONY CHART. Attractive chart providing color swatches for siding plus Faber Birren-recommended color trim and accessories.

P-1280 ALUMINUM SIDING CATALOG. Describes important advantages, construction and design features of horizontal 8" clapboard, horizontal double-four for Colonial effect and vertical 12" board-and-batten for contemporary effect. 8½ × 11. 4 pages. AIA No. 12-C.

P-1297 ASBESTOS–CEMENT SIDING CATALOG. Describes four types of asbestos-cement siding shingles. 8½ × 11. 2 pages. AIA No. 12-B.

Also see 73, 97, 102, 109, 118, 121, 142, 143.

The Celotex Corporation, *see 2, 43, 74, 97, 113, 121.*

Siding continues—

Fenestra Incorporated

FENESTRA F SIDING. Specifications & design information. Available in Galvanized, Aluminum and porcelain Enamelled Aluminum.

Georgia-Pacific

GEORGIA–PACIFIC SIDING AND SHEATHING PRODUCTS. Complete specifications on overlay plywood, lumber and textured sidings, and G–P Premium Sheathing. 8½ × 11. 8 pages. Form AP-2.

Granco Steel Products Company

GRANCO VIN–COR. CATALOG NO. V-91. Description, uses specifications, and illustrated details of new vinyl-protected galvanized steel. Four independent corrosion resistant coatings are "forced dry." Wide variety of colored vinyl available. Vin-Cor surface will not chip or flake. Ideal for wall panels, facades, partitions, etc.

Indiana Limestone Institute, see 2, 29, 53, 82, 85, 93, 114.

Johns-Manville Sales Corporation

JOHNS–MANVILLE COLORBESTOS SIDEWALL SHINGLES. Full color illustrations and descriptions of these distinctive asbestos-cement siding shingles. 1958. 8½ × 11. 4 pages.

JOHNS–MANVILLE CORRUGATED ASBESTOS TRANSITE. Description and construction details on the many uses of this corrugated asbestos building sheet for roofing and siding. Illustrated. 1957. 8½ × 11. 32 pages.

Simpson Timber Company

REDWOOD SIDING AND PANELING. SRMP 029/4859. Exclusive LIFECOAT process applies a coat of high quality stain or paint prime to face, edges and ends of carefully machined, certified kiln-dried redwood. Specifications and color illustrations. 8½ × 11. 4 pages. AIA No. 19-D-2.

United States Plywood Corporation

WELDWOOD DURAPLY AND PERMAPLY. Weatherproof panels and how to use them. 8½ × 11. 8 pages. Form No. 1855.
WELDWOOD SIDINGS. Details and description. 8½ × 11. 12 pages. Form No. 1946.

Wheeling Corrugating Company, see 2, 6, 19, 45, 53, 67, 82, 93, 99, 114, 118, 130.

125. Signaling Systems

Executone, Incorporated

MULTI AUDIO VISUAL NURSE CALL SYSTEM DATA. System description, equipment, wiring plans, specifications. 8½ × 11. 110 pages. Form 387E.

EXISTING HOSPITAL SYSTEM DATA. System description, specifications, and wiring plans for system that adds audio to existing visual nurse call. 8½ × 11. 72 pages. Form 560D.

NEW AUDIO–VISUAL IN–OUT REGISTER SYSTEM. Catalog literature describing new, compact audio-visual register handling up to 1,000 people. 8½ × 11. 4 pages. Form 675A.

PLANT PROTECTION SYSTEM. System description, wiring plans, operating features, and specifications of a system designed to meet all fire alarm, air raid, time signals, and paging requirements of industrial plants. Includes case history. 8½ × 11. 20 pages. Form 483A.

HOSPITAL ENTERTAINMENT SYSTEM. Describes how patient receives radio/TV audio through multi-purpose pillow speaker. 8½ × 11. 6 pages. Form 677.

Also see 25, 128.

Minneapolis-Honeywell Regulator Company, see 6, 8, 37, 38, 49, 71, 84.

126. Sills

Carthage Marble Corporation

PLEASE YOUR CLIENTS WITH MARBLE WINDOW SILLS. Shows the use of marble window stools in hotels, schools, and residences. Stresses the factor of durability, also the psychology of using marble stools for prestige value in low-budget construction. Gives 12 detail drawings of marble window stools in various types of wall and window construction. Also names 10 low-cost domestic marbles suitable for marble sills.

Indiana Limestone Company, Inc.

INDIANA LIMESTONE SILLS. Shows various types and sizes of Limestone Sills and Coping.

Indiana Limestone Institute, see 2, 29, 53, 82, 85, 93, 114.

127. Skylights

American-Saint Gobain Corporation, see 29, 63.

Rohm & Haas Company

DOME SKYLIGHTS OF PLEXIGLAS (PL-301). Detailed description of advantages, function, installation and maintenance procedures, code requirements, and daylighting design calculations for prefabricated skylights with acrylic plastic domes. 1957. 8½ × 11. 16 pages. AIA No. 12-J.

128. Sound Systems

Executone, Incorporated

VOICE-PAGING, MUSIC, ALARMS: SOUND SYSTEMS DATA. System description, equipment, wiring plans, specifications. 8½ × 11. 140 pages. Form. 533C.

A NEW CONCEPT IN SOUND SYSTEMS. Folder containing catalog pages on equipment and accessories. 8½ × 11. Form 535A.

INDUSTRIAL PAGING SYSTEM. Describes operating features and equipment of industrial paging-with-reply system 8½ × 11. Form 395.

TAPED BACKGROUND MUSIC. Describes operating features and equipment of Executone's taped background music system. 8½ × 11. Form. 592B.

HOW TO SELECT THE PROPER SOUND SYSTEM FOR YOUR CHURCH. A guide to church sound systems. 8½ × 11. 27 pages. Form 679.

COMMUNICATION AND SOUND FOR THE MODERN SCHOOL. A guide to school communication and sound systems. 8½ × 11. 8 pages. Form 737.

INTEGRATED COMMUNICATION THROUGH CONSTRUCTION. How Executone will serve the new Holy Cross Hospital. 8½ × 11. 8 pages. Form 719.

7 WAYS TO USE FUNCTIONAL SOUND AND COMMUNICATIONS . . . to improve patient care and hospital efficiency. 8½ × 11. 4 pages. Form E-2604.

8 WAYS TO USE SOUND AND COMMUNICATIONS . . . to enrich school curricula and improve administration. 8½ × 11. 4 pages. Form E-2603.

AUTOMATIC ANNOUNCEMENT SYSTEM FOR AIRPORTS. How Executone improves passenger service at airports. 8½ × 11. 1 page. Form 721.

Also see 25, 125.

Penn Metal Company, Incorporated, see 42, 61, 67, 82, 99, 113.

129. Stainless Steel

Armco Steel Corporation

ARMCO STAINLESS STEELS FOR ARCHITECTURE. A guide to specification and design. Basic data on properties, costs, finishes, and fabrication. 1960. 8½ × 11. 28 pages. AIA No. 15-H.

Also see 93A, 98, 118, 132.

130. Stair Treads

Vermont Marble Company, see 3, 29, 66, 89, 90, 117, 120, 142.

Wheeling Corrugating Company

WHEELING EXPANDED METAL STAIR TREADS. Features two types, strong and economical, for industrial use; also other fabricated expanded metal products. Ex-plate Tread and Anti-Skid Tread pictured with pertinent buying information. 1960. 2 colors. 4 pages. AIA No. 14-D. WC-238-A.

Also see 2, 6, 19, 45, 53, 67, 82, 93, 99, 114, 118.

131. Stairs

National Association of Architectural Metal Manufacturers

METAL STAIR BOOKLET. Illustrates various types of metal stairs and specifications for stairs. Shows methods of constructing metal stairs and railings. 72 pages.

132. Steel Buildings

Armco Steel Corporation

ARMCO STEEL BUILDINGS. Catalog data on Armco Steel Building method for industrial and commercial construction.

Also see 93A, 98, 118, 129.

Indiana Limestone Institute, *see 2, 29, 53, 82, 85, 93, 114.*

133. Steel Products

Armco Steel Corporation, *see 93A, 98, 118, 129, 132.*

The E. F. Hauserman Company, *see 99.*

Penn Metal Company, Incorporated, *see 42, 61, 67, 82, 99, 113.*

Southwest Steel Products—Sheffield Division, Armco Steel Corporation

SOUTHWEST OPEN WEB STEEL JOISTS. Load tables and complete information on S and L series open web joists for economical rigid, fire-resistant and durable floor and roof systems. 8½ × 11. 44 pages AIA No. 13-G.

MATERIALS FOR REINFORCED CONCRETE CONSTRUCTION. Data on Southwest rental and erection service for forming poured-in-place concrete joists, floor and roof systems with removable steelforms. 8½ × 11. 44 pages. AIA No. 4-D.

SOUTHWEST STEEL ROOF DECK. Load tables, dimensional and specification data, erection procedures for constructing light weight, economical roof systems. 8½ × 11. 20 pages. AIA No. 12-C.

134. Stone

Carthage Marble Corporation

CARTHAGE SPLIT-FACE VENEERS. Shows full-color photographs of residences and schools constructed with this split-face veneer that has the rugged look of natural stone, yet is actually a sound and durable Class A marble. Shows ashlar patterns and gives instructions to the mason for setting Carthage Split-Face Veneers.

The Georgia Marble Company

SPLIT FACE MARBLE AND STONE PRODUCTS. Concise, descriptive color brochure on Georgia, Tennessee and Green Mountain (Vermont) split face marble, Alabama Limestone split face and marble Patio Flagging. Mason's guide and specification sheet giving technical data on setting, mortars, patterns, cleaning, etc. 8½ × 11.

ROCKWOOD IMPERIAL VEINED ALABAMA LIMESTONE. Full color brochure illustrating and describing the contemporary use of this distinctive stone as dimension stone, split face ashlar and Super-Roman limestone brick. 16 pages.

BANKING AND STONE. Exterior and interior uses of marble. limestone and Alberene Stone in modern banking and savings and loan institutions. Profusely illustrated with outstanding buildings located throughout the United States. 16 pages.

Also see 118, 143.

Indiana Limestone Company, Incorporated

CUT INDIANA LIMESTONE. Complete AIA File for fabricating and setting cut Indiana Limestone. 8½ × 11.

SPLITFACE AND SHOT SAWN INDIANA LIMESTONE. Specification Sheets and Masonry Guide. 8½ × 11. 8 pages.

Marble Institute of America, Incorporated, *see 89, 90.*

135. Store Fronts

American Art Metals Company

AMARLITE ALUMINUM STORE FRONTS. Catalog giving details and specifications for sash, fascia, bulkheads, division bars, corner bars, sills, jambs, and various store front mouldings. 12 pages. AIA No. 26-D.

American-Saint Gobain Corporation, *see 29, 63.*

Kawneer Company

ALUMINUM STORE FRONTS. Describes full line of Kawneer Store Front materials including canopies. Includes specifications. Illustrated. AIA No. 35-P-2.

Also see 29, 30, 34, 41, 44, 152.

Libbey-Owens-Ford Glass Company

TODAY'S MAIN STREET. Booklet with photographs illustrating practically and esthetically how glass is used in a wide range of business places. 4 colors. 16 pages. 1960.

Also see 29, 30, 33, 63, 153.

Mo-Sai Institute, Incorporated

FACE-LIFTING MAIN STREET WITH MO-SAI. Special section describes method of matching and contrasting Mo-Sai textures and colors on existing stores, offices, and other buildings. Also shows various methods of anchoring Mo-Sai facings to existing buildings and new construction. 8½ × 11. 16 pages.

Pittsburgh Plate Glass Company, *see 63.*

United States Plywood Corporation

WELDWOOD PORC-LIN-PLY. Describes the uses of porcelain-faced plywood panels. Form No. 1761.

DESIGN MANUAL ON WELDWOOD CURTAIN WALL PANEL. Description and instruction details. 8½ × 11. 32 pages. Form No. 1720.

Vermont Marble Company, *see 3, 29, 66, 89, 90, 117, 120, 142.*

136. Structural Clay Products

Robinson Brick & Tile Company

"MODERN BRICK BY ROBCO." Includes size, color, and other pertinent information on ROBCO Glazed and Unglazed Facing Brick. Guide specification for architects. 20 color reproductions. 4 pages plus color cards.

Structural Clay Products Institute

CLAY MASONRY INSULATED CAVITY WALLS. 8½ × 11. 2-colors. 16 pages. Describes design and construction of vermiculite-insulated clay masonry cavity walls. AIA No. 5-A.

COMBINATION TILE AND CONCRETE SLABS. 8½ × 11. 24 pages. Tables of safe superimposed loads on combination tile and concrete slabs for simple, end and interior spans. AIA No. 4-E-6 and 10-A.

CLAY MASONRY SCREENS. 8½ × 11. full-color. 8 pages. Contains photos of solar screen installations as well as examples of a variety of units and designs. AIA No. 35-P-2.

RECOMMENDED GUIDE SPECIFICATIONS FOR CLAY MASONRY CONSTRUCTION. Complete guide specification (with notes to the architect) for brick, tile, facing tile and ceramic veneer construction. 1959. AIA No. 5.

"SCR"* SCHOOL DESIGN CONCEPT. Information on new, interior load-bearing partition design for low-cost schools of "SCR brick," plus cost study. 1955. AIA No. 5-A.

* *Reg. U. S. Pat. Off., Pat. Pend., SCPRF*

THE FUTURE IS HERE TODAY! Brochure discussing America's ever-increasing need for more schools and the adaptability of clay masonry to minimum budget school designs. 1955.

BRICK AND TILE WALLS REDUCE AIR-CONDITIONING LOADS. Cost-cutting advantages of brick and tile for air-conditioned structures. 1954.

BRICK AND TILE BUILD BETTER CURTAIN WALLS. Folder containing 10 important facts to be considered on the construction of curtain walls. 1958.

INSTALLATION OF ARCHITECTURAL TERRA COTTA AND CERAMIC VENEER. Step-by-step recommendations for the application of both adhesion and anchored types of ceramic veneer. 1952. AIA No. 9-B.

ADHESION TYPE CERAMIC VENEER. Installation of adhesion type ceramic veneer discussed, tables, photos and construction details. 1953. AIA No. 9-B.

Structural Clay Products continues—

RECOMMENDED BACKING FOR ARCHITECTURAL TERRA COTTA AND CERAMIC VENEER. Discusses materials and methods for recommended backing for terra cotta and ceramic veneer in both interior and exterior construction. Photos and details. 1954. AIA No. 9-A.

REMODELING WITH CERAMIC VENEER. Discusses preparation of the building and application of adhesion type and anchored type ceramic veneer. 1955. AIA No. 9-A.

COLOR SELECTION GUIDE. Full-color reproduction of a cross-section of ceramic veneer colors now available with instructions to the architect on how to obtain actual ceramic samples. 1958. AIA No. 9.

137. Structural Facing Tile

Facing Tile Institute

"SCR acoustile"*—SOUND ABSORBENT STRUCTURAL FACING TILE. Discusses properties, specifications and acoustical design. 8½ × 11. 4 pages. AIA No. 30-A.
* *Reg. U.S. Pat. Off, Pat Pend., SCPRF.*

STRUCTURAL CLAY FACING TILE. Recommended construction practices and brief description of types, sizes, colors and finishes. 1951. AIA No. 10-B.

COLOR–ENGINEERING WITH FACING TILE. Contains manufacturers' color designations and table showing suggested colors for various installations. 1953.

REINFORCED STRUCTURAL FACING TILE MASONRY. Details of various types of reinforced facing tile walls. 1954.

STACK BONDS IN STRUCTURAL CLAY FACING TILE. Description of layout and bonding for typical wall sections. 1955. AIA No. 10-B.

EXTERIOR WALLS OF UNGLAZED STRUCTURAL FACING TILE. Design, specifications and construction details for exterior glazed and unglazed facing tile walls. AIA No. 10-B.

STRUCTURAL FACING TILE 6″ LOAD–BEARING WALLS. Discusses compressive and transverse strength tests as well as resistance to fire and sound resistance. AIA No. 10-B.

FACING TILE WALL SECTIONS. Contains important design data on 17 facing tile and glazed brick exterior and interior wall assemblies. 1958. AIA No. 10-B.

SPECIFICATIONS FOR GLAZED AND UNGLAZED STRUCTURAL FACING TILE. This latest revision, November, 1959, includes material specifications, physical requirements, methods of test, etc. AIA No. 10-B.

ESSENTIALS OF GOOD STRUCTURAL CLAY FACING TILE WORKMANSHIP. Contains the "do's" and "don'ts" of good facing tile workmanship, as well as mortar specifications. 1958. AIA No. 10-B.

Kraftile Company

GRAPHIC STANDARDS FOR GLAZED TILE. *Fourth edition.* Shape charts, construction details, and specifications for glazed structural wall units for Western construction. 1958. 8½ × 11. 33 pages.

GLAZED NORMAN BRICK. Detail page includes size, weight, strength and erection details. 8½ × 11.

Robinson Brick & Tile Company

STRUCTURAL GLAZED FACING TILE. *6T Series 15 Harmony Colors by Color Standards Division Container Corporation of America:* Harmony Color Brochure; Comparative Wall Cost Study Booklet; Useful Design Detail Booklet; Guide Specification.

138. Swimming Pools

E. L. Bruce Company, Bruce-Coraloc Pools Division

CORALOC PACKAGED SWIMMING POOLS. Sweet's Catalog insert, 2 colors, describes patented prefabricated steel wall pool kit available to builders, architects. Fully illustrated 8½ × 11. 4 pages.

Also see 57, 58.

Josam Manufacturing Company

MANUAL SP-7. Product illustrations, detailed drawings, illustration diagrams of typical swimming pools. 1960. 8½ × 11. 26 pages. AIA No. 35-F-2.

National Paint, Varnish & Lacquer Association

PAINTING SWIMMING POOLS.

139. Tackboard

Dodge Cork Company

DODGE CORK COMPANY BROCHURE. Contains samples of comprehensive line of vinyl faced, burlap backed and unsupported cork tackboards. All colors shown. Complete installation specifications. AIA No. 35-N-3.

S. H. Pomeroy Company, *see 7, 14, 70, 80, 152.*

United States Plywood Corporation

WELDWOOD TACKBOARD. Description and installation details. 3 colors. 8½ × 11. 2 pages. Form No. 1796.

140. Termite Protection

E. L. Bruce Company, Terminix Division

BRUCE–TERMINIX TERMITE PROTECTION. Sweet's Catalog insert (Key G-16). Full color brochure for builders, architects. Describes termite protection for new homes, construction recommendations, lists nationwide Terminix operators with phone numbers. 8½ × 11. 4 pages.

HOW TO PROTECT AGAINST TERMITE HAZARDS. Covers structural "built-in" termite hazards that virtually invite termite attack in both conventional and concrete slab construction, and how to eliminate them. 8½ × 11. 4 pages.

HOW TO PROTECT YOUR HOME FROM TERMITES (KEY AAA). Describes the life and destructive habits of subterranean termites and modern methods used to protect against their attack. Fully illustrated. 8½ × 11. 24 pages.

HOW TO PROTECT NEW HOMES AGAINST TERMITES (KEY G-8). Illustrates common structural termite hazards in concrete slab and conventional construction. Contains architect specifications for corrections. 8½ × 11. 2 pages.

National Lumber Manufacturers Association

DESIGN OF WOOD STRUCTURES FOR PERMANENCE. (No. 6 in Wood Construction Data series.) Text and detail drawings offer positive approach to elimination of decay and termite problems through proper construction and use of naturally durable or preservatively treated wood where exposure hazard indicates. 1960. 2 colors. 16 pages. 8½ × 11. AIA No. 19-B.

141. Terrazzo

National Terrazzo & Mosaic Association

CATALOG AND DESIGN BOOK. (3rd edition). 100 color plates of terrazzo and mosaics, full color illustrations of finished work. Architectural details, and full technical information on Terrazzo and Mosaics. 1951. 8½ × 11. 136 pages. Loose leaf metal binder. AIA No. 23-E. Price $10.00.

TECHNICAL BOOKLET (Revised January 1961). Technical data and Architectural specifications; illustrating and describing use of terrazzo for indoor and outdoor installations, in hospital operating rooms. Maintenance and resiliency tests. Illustrated. 8½ × 11. AIA No. 23-E.

ULTIMATE COST OF FLOORING IN SCHOOL BUILDINGS (Research report). A study of over seventy tax-exempt school buildings, comparing ultimate cost of terrazzo, asphalt and vinyl tile floor finishes. Illustrated. 8½ × 11.

142. Tile

Allied Chemical Corporation, Barrett Division

F–1191. "NEW INTERIORS" BOOKLET. Describes how Barrett Interior Board Products can create "New Interiors" in home or office, with a special emphasis on the new decorator patterns of Barrett ceiling tile. Illustrated. Full color. 8½ × 11. 12 pages.

Also see 73, 97, 102, 109, 118, 121, 124, 143.

American Olean Tile Company, *see 21.*

Armstrong Cork Company, *see 2, 55, 58, 77, 114, 116, 149.*

Azrock Floor Products Division, Uvalde Rock Asphalt Company, *see 58.*

Congoleum-Nairn, Incorporated

NAIRON CUSTOM TILE. New folders illustrating the patterns and colors of full thick vinyl tile for commercial and residential use.

ASPHALT AND VINYL BEST TILE. Illustrating colors and exclusive Gala, Brushwood, Sparklewood and featherveining decorations.

WONDERFLOR VINYL TILE. Folders illustrating the new solid vinyl tile for residential use only. Including new Metallics, Parfait Marble and Embossed Woodhues decorations.

Dodge Cork Company

SWEET'S CATALOG INSERT. Latest Edition. Color plates showing full color line, description, technical data and specifications of Dodge Siboney Vinyl, SG Cork, Standard Cork, Vinylwood Cork tile, Panelcork and Cork Brick wall material. 8½ × 11. 8 pages. AIA No. 23-G.

Kentile Incorporated, *see 58.*

Kraftile Company

PATIO TILE. Methods of laying, sizes, patterns, etc. 8½ × 11.

The Mosaic Tile Company, *see 21.*

Stylon Corporation

FULL LINE OF CERAMIC WALL AND FLOOR TILE. (And vitreous china bathroom accessories). Design service available. Complete catalog and special architects' portfolio can be had on request. New one-piece ceramic counter-top molded edge.

Vermont Marble Company

MARKWA THIN MARBLE WALL AND FLOOR TILE. Illustrations of installations and complete specifications. Full color prints of 18 varieties. 1961. 8½ × 11. 8 pages. AIA No. 23-N.

Also see 3, 29, 66, 89, 90, 117, 120.

143. Toilet Compartments

Carthage Marble Corporation

STALLPACK, SWEET'S ARCHITECTURAL FILE INSERT. 1961 EDITION. Shows suspended and floor mounted installations of this complete, prefabricated marble toilet enclosure. Photographs and complete description of non-ferrous hardware. Shows details drawings and specifications.

The Georgia Marble Company

MARBLSTAL PREFABRICATED MARBLE TOILET COMPARTMENTS. Information and details on both floor-mounted and suspended Marblstal—a compartment that is complete with marble components, anodized aluminum extrusions and metal doors down to the coat hook, hinges and screws. Includes specifications.

Also see 118, 134.

The Mills Company

MILLS METAL TOILET COMPARTMENTS—CATALOG 61-T. Complete description of five types of Mills toilet compartments, showers, dressing booths, and hospital cubicles. Attractive color charts, complete construction details, typical layouts, specifications and other technical data. Full color. 8½ × 11. 24 pages.

MILLS "FACT-PAK" PORTFOLIO. Mills Toilet Compartment information for helpful selection. Reference data consisting of product information, specifications, details, layout hints, cost differentials between different styles, suggested layouts and related cost economies. 8½ × 11. 17 pages.

Also see 99.

Sanymetal Products Company, Incorporated

TOILET COMPARTMENT SKETCH BOOK. Thought provoking designs for new toilet compartment and washroom layouts illustrates unusual application of all types of toilet compartments. Color. 6 pages. 8½ × 11.

Also see 19.

Vermont Marble Company, *see 3, 29, 66, 89, 90, 117, 120, 142.*

144. Vacuum Cleaning

Hillyard Chemical Company

DESCRIBES HILLYARD HIL-VAC WET AND DRY VACUUM. Includes complete specifications.

Multi-Clean Products, Incorporated

BETTER FLOOR CARE. Describes complete MULTI-CLEAN line of portable Industrial Vacuum Cleaners for both wet and dry pickup. Includes specifications, capacities and other data to help in selecting right size and model to do the job. Also describes Multi-Clean Floor Machines, Scrubbing Machines, as well as Floor Waxes, Cleaners, Sealers. Illustrated. 8 pages. Form 1561.

Spencer Turbine Company

INSTALLED VACUUM CLEANING SYSTEMS. Catalog No. 160 describes installed vacuum cleaning systems for institutional, commercial and municipal buildings. 8 pages.

VACUSLOT SYSTEMS. Bulletin 153D illustrates, describes and provides sample specifications on Spencer Vacuslot system, the *built-in* housekeeping facility.

145. Vapor Barriers

The Dow Chemical Company, Plastics Sales Department

POLYFILM (Form No. 171-134). Properties and information on suggested uses. 8½ × 11. 20 pages.

The Tremco Manufacturing Company

TREMCO BITUMINOUS MOISTURE BARRIERS. AIA No. 7-a; 7-b.

146. Ventilators

American Air Filter Company, Incorporated

BULLETIN NO. 650-EIA. HERMAN NELSON AUDITORIUM UNIT VENTILATORS. 1960. 8½ × 11. 60 pages.

BULLETIN NO. 3402. HERMAN NELSON VENTIMATIC SHUTTER. 1951. 8½ × 11. 1 page.

BULLETIN NO. ASA-311. HERMAN NELSON UNIT VENTILATORS. 1960. 8½ × 11. 24 pages.

BULLETIN NO. ASA-320. HERMAN NELSON UNIT VENTILATORS COLOR SELECTION GUIDE. 1960. 8½ × 11. 4 pages.

BULLETIN NO. 600-A5. HERMAN NELSON RENEWABLE FILTERS. 1954. 8½ × 11. 1 page.

BULLETIN NO. 625-S1. HERMAN NELSON AMERVENT. 1953. 8½ × 11. 8 pages.

BULLETIN NO. 600-S2. HERMAN NELSON UNIT VENTILATORS FILTER INDICATOR. 1955. 8½ × 11. 1 page.

BULLETIN NO. 600-E5. HERMAN NELSON UNIT VENTILATOR LIGHT/STOP CURTAIN ACCESSORY. 8½ × 11. 1 page.

BULLETIN NO. 610-EIA. APPLICATION DATA FOR FORCED HOT WATER SYSTEMS WITH VALVE CONTROLLED UNIT VENTILAORS. 1960. 8½ × 11. 32 pages.

BULLETIN NO. 615-EIA. HERMAN NELSON ELECTRIC UNIT VENTILATOR. 1961. 8½ × 11. 28 pages.

BULLETIN NO. 665-EIA. TYPE "Q" FINNED RADIATION AND ENCLOSURES.

BULLETIN NO. 600-EIA. APPLICATION DATA FOR STEAM UNIT VENTILATORS. 1960. 8½ × 11. 32 pages.

BULLETIN NO. 600-E2. FUNCTIONAL STORAGE ACCESSORIES WITH STEAM, HOT WATER AND ELECTRIC UNIT VENTILATORS. 1960. 8½ × 11. 16 pages.

BULLETIN NO. 635-E2. FUNCTIONAL STORAGE ACCESSORIES WITH AIR CONDITIONING UNIT VENTILATORS. 1960. 8½ × 11. 16 pages.

Also see 6.

Ventilators continues—

Indiana Limestone Institute, *see 2, 29, 53, 82, 85, 93, 114.*

Winco Ventilator Company

VENTILATORS FOR USE WITH GLASS BLOCK. Both commercial and residential types. 4 pages.

147. Vermiculite Products

Vermiculite Institute

STANDARD SPECIFICATIONS FOR VERMICULITE PLASTERING AND FOR VERMICULITE ACOUSTICAL PLASTIC. Covers application of vermiculite plaster base coat to a variety of surface conditions and includes detailed suggestions for how to obtain best results. 1956. 8½ × 11. AIA No. 25-A-5 and 39-B.

SPECIFICATIONS FOR VERMICULITE INSULATING CONCRETE ROOF INSULATION AND ROOF DECKS. Long form covers both roof insulation and roof decks, and includes venting details and load span tables for sub-purlins. 12 insert sheets cover specific mixes over various bases. 1958. 8½ × 11. AIA No. 4-E-13 and 37-B-2.

VERMICULITE LOOSE-FILL BUILDING INSULATION. Describes the properties of the material and how it is installed. Procedures illustrated with typical construction details. Data authenticated by a nationally known technical consultant give potential savings in fuel and summer air-conditioning costs. 1957. 8½ × 11. AIA No. 37-C-2.

VERMICULITE WATER-REPELLENT MASONRY FILL INSULATION. Comprehensive tables of heat transmission coefficients are given for cavity walls of brick, tile or stone; for backup walls with various facings; and for concrete block walls built with different block sizes. Coverage table and a short form specification included. 1960. 8½ × 11. AIA No. 37-C-2.

DATA ON VERMICULITE CONCRETE PANEL OR SPANDREL WALLS. A kit containing data on the design and fire resistance of machine-applied vermiculite concrete spandrel walls. 1954. 8½ × 11. AIA No. 4-E-13.

VERSATILE VERMICULITE IN MODERN INDUSTRY. Summarizes current industrial uses of vermiculite. 1954. 8½ × 11.

VERMICULITE FIRE- RESISTANCE RATINGS FOR PLASTER, ACOUSTICAL PLASTIC, AND CONCRETE. The constructions are described as tested. Included are new assemblies that have proved more economical than earlier types, such as direct-to-steel fireproofing and formed steel floors and roof decks. 38 drawings show fireproofing details for both concrete and steel roof and floor assemblies, columns, beams, girders and trusses, panel or spandrel walls, and solid plaster partitions. 1959. 8½ × 11. AIA No. 21-C-1.

VERMICULITE TYPE-MK FIREPROOFING. Specifications and technical data sheet for direct-to-steel mill-mixed fireproofing of steel floors, roofs, and beams by machine. No primer or adhesive on the steel is needed. 1960. 8½ × 11.

AN ANALYSIS OF THE FIRE RESISTANCE OF STEEL FLOOR CONSTRUCTIONS PROTECTED ON THEIR UNDERSIDE BY DIRECTLY-APPLIED VERMICULITE ACOUSTCAL PLASTIC. Summarizes tested low-cost floor constructions. Includes recommendations for direct-to-steel fireproofing with vermiculite acoustic of various floor assemblies. 1959. 8½ × 11.

DIGEST OF REPORT OF TEST PROGRAM TO DEMONSTRATE THE ADEQUACY OF VERMICULITE CONCRETE AS A HORIZONAL DIAPHRAGM. This report by a noted consulting structural engineer is of special interest in areas subject to seismic disturbances, where it is of prime importance to determine the ability of roof deck materials to resist lateral forces and to function as a horizontal diaphragm. 1957. 8½ × 11.

148. Wall Board

Allied Chemical Corporation, Barrett Division

F-1180. FIBERBOARD PRODUCTS BOOKLET. Descriptions, illustrations, and specifications of all Barrett Fiberboard Products. 4 color. 8½ × 11. 8 pages.

G-1193 GYPSUM "FIREWALL" BOARD FOLDER. Complete story of Barrett's most fire-resistant interior building board. 8½ × 11. 4 pages.

G-1218 GYPSUM WALL BOARD FOLDER. Outlines advantages, application steps, and specifications of modern dry wall interior construction with Barrett Gypsum Wallboard. Illustrated. 8½ × 11. 6 pages.

G-1282 GYPSUM PRODUCTS CATALOG. Features Gypsum Wallboard (standard, insulating, grainboard, Lam-O-Base backer board, Firewall board), Gypsum sheathing, Gypsum lath and plaster (lath, plain or perforated, insulating lath, cement plaster, Bar-O-Lite plaster, gauging plaster). 8½ × 11. 4 pages. AIA Nos. 23L, 19-D-3, 21-A-2, 20-B-2.

G-1218 MODERN DRY WALL CONSTRUCTION. Outlines advantages, application steps, and specifications of modern dry wall interior construction with Barrett Gypsum Wallboard. Illustrated. 8½ × 11. 6 pages. AIA No. 23-L.

Also see 73, 97, 102, 109, 118, 121, 124, 142.

The Celotex Corporation

CELO-ROK GYPSUM PRODUCTS DATA.

Also see 2, 43, 74, 97, 113, 121.

Georgia-Pacific

GEORGIA-PACIFIC HARDBOARDS. Complete specification data including utility, garage panels, standard, tempered, perforated, textured, factory finished and other decorative surfaces. 8½ × 11. 8 pages. Form HB16.

Johns-Manville Corporation

J-M MICRO-FLEXBOARD. Complete description, illustrations and physical characteristics of this strong, tough asbestos-cement base sheet adaptable to varied types of laminating and finishing. For exteriors or interiors. 1959. 8½ × 11. 6 pages.

JOHNS-MANVILLE CEILING PANELS AND WALL PLANK. Full line of ceiling panels and wall plank illustrated in full color. Includes acoustical tile and shows simplified directions for application. 1958. 6 × 9. 8 pages.

JOHNS-MANVILLE TRANSITOP. Description and illustrations of the many uses of this insulating structural panel for exterior and interior walls. 1957. 8½ × 11. 36 pages.

149. Wall Covering

American Olean Tile Company, *see 21.*

American-Saint Gobain Corporation, *see 29, 63.*

Armstrong Cork Company

ARMSTRONG COUNTER-TOP AND WALL COVERING MATERIALS. Unabridged Architect's Specifications for the specifying and installation of Linoleum, Corlon, and Counter Corlon for walls and counter-tops. Latest edition. 8½ × 11. AIA No. 23-L and/or No. 35-C-12.

Also see 2, 55, 58, 77, 114, 116.

E. L. Bruce Company, *see 57, 58, 138.*

Congoleum-Nairn, Incorporated

CONGOLEUM-NAIRN WALL-EVER VINYL. Patterns, illustrations, physical characteristics, maintenance and installation data for this newly introduced wallcovering.

Dodge Cork Company

DODGE PANELCORK BROCHURE. Architect's specifications for the specifying and installation of Dodge Panelcork to studding and over plaster. 8½ × 11.

DODGE CORK BRICK. Specifications for installation and complete color selections of patterns available.

Formica Corporation, Subsidiary of American Cyanamid Company, *see 104.*

New Castle Products, Incorporated

MODERN-COTE. Full color booklet on the complete line of vinyl and wood veneer, fabric-backed wall coverings. 4 pages.

United States Plywood Corporation

WELDWOOD KALISTRON. Architectural specifications on the Weldwood Kalistron and Kalitex line of flexible wall covering materials. 8½ × 11. 4 pages. Form No. 2130.

WELDWOOD FLEXWOOD. Architectural specifications on Weld-

wood Flexwood, decorative wall covering. 8½ × 11. 6 pages. Form No. 2129.

Vermont Marble Company, *see 3, 29, 66, 89, 90, 117, 120, 142.*

150. Wall Hydrants

Josam Manufacturing Company

MANUAL HY-2. Illustrations and description of non-freezing wall, yard and post hydrants. 1960. 8½ × 11. 4 pages. AIA No. 29-D-9.

151. Wall Panels, Prefinished

E. L. Bruce Company, Welsh Plywood Division

SWEET'S CATALOG INSERT, 1961 EDITION. Full color illustrations, descriptions, technical data and architects' specifications on all PlyWelsh Prefinished Hardwood Panels. 8½ × 11. 4 pages.

PLYWELSH PREFINISHED PANELS. PlyWelsh line of prefinished wall panels. Includes information on PlyWelsh "Panel Stretchers" and matching molding and putty-stiks. Illustrated. Color. 8½ × 11. 4 pages.

PLYWELSH PLANNING KIT. Guide with diagrams, technical data, graphs and scaled photographic reproductions in color of PlyWelsh Prefinished Panels. For planning paneling projects and estimating paneling requirements. 8½ × 11. 4 pages.

PLYWELSH PREFINISHED MOLDINGS. Full color folder with illustrations and complete information on PlyWelsh moldings prefinished to match PlyWelsh Prefinished Panels. 8½ × 11. 4 pages.

HOW TO INSTALL PLYWELSH PREFINISHED PANELING AND MOLDING. Complete, concise instructions for installing PlyWelsh panels and molding in new construction or over old walls. 8½ × 11. 4 pages.

Also see 57, 58, 138.

The Celotex Corporation, *see 2, 43, 74, 97, 113, 121.*

Fenestra, Incorporated

FENESTRA CURTAIN WALL. Metal windows, integrated with insulated metal wall construction. General installation details and engineering data on Fenestra's Wall Panel Units—uninsulated "F" siding; insulated "C" panels and "FP" fire partitions.

FENESTRA FA PANELS. Specification and design information. Available in porcelain enamelled aluminum.

Georgia-Pacific

GEORGIA-PACIFIC DECORATIVE PLYWOOD PANELING. Specifications and prices, full color reproductions of woods and installations. 8½ × 11. 12 pages. Form #PP-13.

GEORGIA-PACIFIC HARDBOARDS. Specifications on factory finished hardboard types. 8 pages. 8½ × 11. Form #HB-16.

The E. F. Hauserman Company, *see 99.*

Indiana Limestone Institute, *see 2, 29, 53, 82, 85, 93, 114.*

Mo-Sai Institute, Inc.

MO-SAI PRECAST FACING. Information on physical characteristics, anchoring methods, special shapes, specifications, and full-color spread on typical Mo-Sai textures and colors. 4 colors. 8½ × 11. 8 pages. Completely new. 1961 edition of Sweet's insert. AIA No. 4-K-1.

Portland Cement Association

PRECAST CONCRETE WALL PANELS. Discusses design, production, handling and erection of precast concrete wall panels, both solid and sandwich types, the sandwich type having insulation between two layers of concrete. Methods of attachment to concrete and steel frames are also discussed. 8½ × 11. Illustrated. 16 pages.

TILT-UP CONSTRUCTION. Discusses a method of construction in which wall panels are cast in the horizontal position, usually on the floor of the building, tilted into the vertical position and joined together to form a wall. Covers advantages, design, construction, details, methods of tilting and insulation of walls. Illustrated. 8½ × 11. 32 pages.

United States Plywood Corporation

PREFINISHED WELDWOOD. Includes color illustrations of all panel types plus installation details. 8½ × 11. 24 pages. Form No. 1707D.

152. Windows

Fenestra Incorporated

COMPLETE DESCRIPTION, types and sizes, specifications, on aluminum intermediate, institutional and commercial type windows.

Michael Flynn Manufacturing Company

LUPTON WINDOW CATALOG. Details and specifications for Lupton Windows and Doors in aluminum and steel. Tab cut index. 1961. AIA No. 16-E.

Kawneer Company

ALUMINUM SEALAIR WINDOWS. Technical booklet including complete details and specifications for Kawneer Sealair Windows. AIA No. 16-E.

Also see 29, 30, 34, 41, 44, 135.

S. H. Pomeroy Company

ALUMINUM WINDOWS. Architectural details and specifications of Pomeroy 500 series double-hung windows, 378 double-hung and single-hung windows; VARAVENT window system for design flexibility—pivoted, projected, hopper, fixed, for curtain-wall or single openings; Monumental R series pivoted windows.

STEEL WINDOWS. Architectural details and specifications of steel double-hung windows for monumental, institutional, and commercial construction. May be Underwriters Labeled, self-closing.

Also see 7, 14, 70, 80.

R.O.W. Window Sales Company

SWEET'S CATALOG INSERT. 1961 Edition. Shows complete line of R. O. W. wood windows: double hung, horizontal sliding, multiple awning; casement. Explains features, gives sizes and elevation, scale details. 1961. 4 pages.

"REMOVABILITY MAKES THE BIG DIFFERENCE." Consumer brochure stressing styling features of fine wood double hung windows. Illustrates range of cutups available in numerous groupings. Illustrates combinations of units pictorially in natural home interiors. 8½ × 11. 2 pages.

PICTURE WINDOW WOOD GLIDING UNIT. Consumer brochure shows styling features and complete versatility of the popular horizontal sliding R. O. W. High-Lite Gliding Window. 8½ × 11. 4 pages.

COMPLETE INSTALLATION INSTRUCTIONS. For removable wood window double hung units. Shows pictorially step-by-step rules for better window installation. Also covers proper insulation, painting and plastering. 7 × 10. 16 pages.

Rolscreen Company

PELLA CASEMENT DETAIL FILE. Contains complete set of ¼" scale details for all types of construction. Details are loose-leaf type in handy file folder. Easy to trace. 1961. 8½ × 11. 27 pages. AIA No. 16-L.

PELLA MULTI-PURPOSE AND TWINLITE WINDOW DETAIL FILE. Contains details and descriptions of Pella Multi-Purpose and Twinlite Windows. Shows how they can be used as basement, awning or casement windows. 1961. 8½ × 11. 20 pages. AIA No. 16-L.

Winco Ventilator Company

WINDOWS, COMMERCIAL, ARCHITECTURAL PROJECTED, AND RIBBON WINDOWS AND PANEL WALLS. 20 pages.

153. Window Wall

American-Saint Gobain Corporation, *see 29, 63.*

Arcadia Metal Products

ARCADIA ALUMINUM WINDOW WALL. Complete description and data for specifying Arcadia window wall. Installation details; features and design described. Catalog sheets and detail packets.

Kawneer Company, *see 29, 30, 34, 41, 44, 135, 153.*

Libbey-Owens-Ford Glass Company

SLIDING GLASS DOORS. Illustrates Parallel-O-Plate and Thermopane sliding doors in homes, schools and commercial buildings. 1958. 2 color 12 × 9.

Also see 29, 30, 33, 63, 135.

Wheeling Corrugating Company, *see 2, 6, 19, 45, 53, 67, 82, 93, 99, 114, 118, 130.*

members of the producers' council, inc.

For complete details about products or services available through Producers' Council members, you may address your inquiries directly to the manufacturer.

COMPANY MEMBERS

(R) indicates Regional Member

Adam, Frank, Electric Company
P. O. Box 357
St. Louis 3, Missouri

Allied Chemical Corporation
Barrett Division
40 Rector Street
New York 6, New York

Aluminum Company of America
1501 Alcoa Building
Mellon Square
Pittsburgh 19, Pennsylvania
Division:
Cupples Products Corporation
2650 South Hanley Road
St. Louis 17, Missouri

American Air Filter Company
215 Central Avenue
Louisville 8, Kentucky
Subsidiaries and Divisions:
(Louisville address)
Air Filter Division
Engineered Air Systems Division
Famco Fibers
School Air Systems Division

American Art Metals Company
433 Highland Avenue, N. E.
Atlanta 12, Georgia

American-Olean Tile Company
Division, National Gypsum Co.
1000 Cannon Avenue
Lansdale, Pennsylvania

American Radiator & Standard Sanitary Corporation
40 West 40th Street
New York 18, New York
Subsidiaries and Divisions:
Air Conditioning Division
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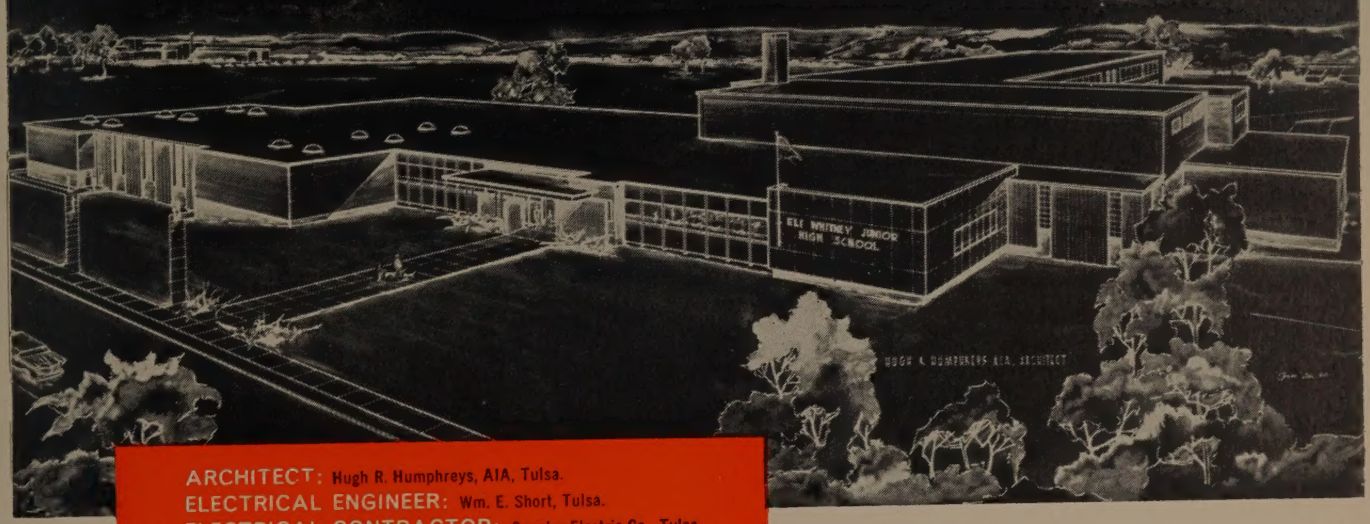

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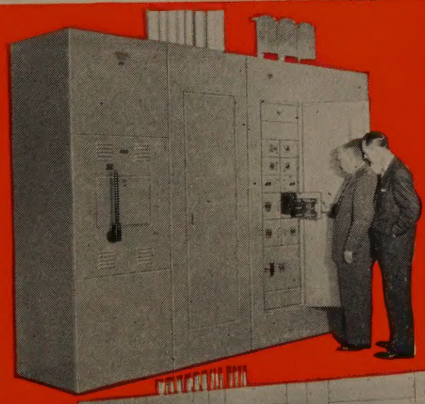

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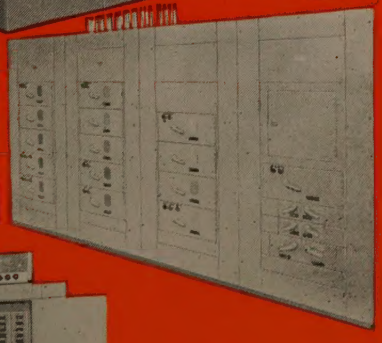

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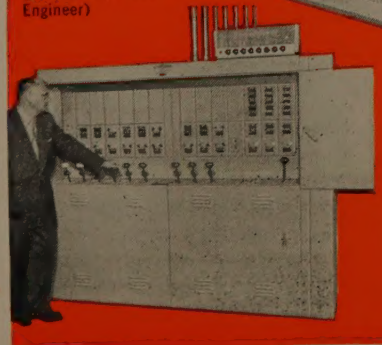

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